INPUT-OUTPUT AND SECONDARY PRODUCTION

by

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B.S., Economics
Massachusetts Institute of Technology
February 1982

Submitted in Partial Fulfillment
of the Requirements for the
Degree of

MASTER IN CITY PLANNING

at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

June 1982

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ABSTRACT

The scope of this thesis is the exploration of the alternative ways of treating the problem of secondary production in input-output analysis, and determining what effect the different treatments of secondary products have on the level and composition of the output estimates obtained when the input-output model is implemented. First, the theoretical structures of five methodologies are discussed. Second, the five methodologies are used in implementing the input-output model using 1963 and 1972 U.S. input-output data at 19- and 78-industry classification levels. It is concluded that, while at the 19-industry level, the choice of methodology does not significantly affect the outcomes of the input-output model, it leads to considerably different outcomes at the 78-industry level. Finally, in Appendix 1, an alternative accounting structure for two of the methodologies is presented.

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ACKNOWLEDGMENTS

I would like to thank my supervisor, Professor Karen R. Polenske, who has guided me throughout the completion of this thesis, and Priscilla F. Kelly, who has helped with the typing.

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The purposes of this report are to explore alternative ways of treating the problems of secondary production in input-output analysis and to determine what effect the different treatments of secondary products have on the level and composition of the output estimates obtained when the input-output model is implemented. First, the theoretical structure of five methodologies are discussed. Second, the five methodologies are used in calculating the 1963 U.S. inverse matrices at 19- and 78-industry classification levels. The 1972 U.S. final-demand is used to generate output estimates, using the five inverse matrices. Both the inverse matrices and the outputs are compared at the 19-industry and 78-industry levels. It is concluded that, while at the 19-industry level, the choice of methodology does not significantly affect the outputs of the input-output model, the outputs from the alternative methodologies differ considerably at the 78-industry level.

THE NOTATIONS

The notations used in this report are explained below. There exist slight differences in the notations used here and the notations used by the Bureau of Economic Analysis (BEA) and the United Nations (UN).

U is a commodity-by-industry matrix in which each column shows for a given industry the amount of each commodity it uses (Use matrix).

M is an industry-by-commodity matrix in which each column shows for a given commodity the amount of output produced in each industry (Make matrix).

M' is the transpose of the Make matrix in which each column shows for a given industry the amount of output it produces of each commodity (transposed Make matrix).

N is the same as the Make matrix except the diagonal elements are zero (secondary matrix).

P is a commodity-by-commodity matrix in which each column shows for a given commodity the amount of each commodity used to produce the given commodity (pure-commodity flow matrix).

Y is a column vector in which each entry shows the total sales to final demand of each commodity (final demand vector).

Q is a column vector in which each entry shows the total amount of the output of each commodity (commodity output vector).

X is a column vector in which each entry shows the total amount of the output of each industry (industry output vector).

V is a column vector in which each entry shows the total amount of value added for each industry (value added vector).

B is the column-standardized Use matrix (in coefficient form). It is a commodity-by-industry matrix in which entries in each column show the amount of each commodity used by a particular industry per dollar of the output of that industry (standardized Use matrix).

D is the column-standardized Make matrix (in coefficient form). It is an industry-by-commodity matrix in which entries in each column show, for a given commodity, the proportion of the total output of the

commodity produced in each industry. It suggests that commodities come in their own fixed proportions from the various industries (market-shares matrix).

C is the column-standardized transposed Make matrix (in coefficient form). It is a commodity-by-industry matrix in which entries in each column show, for a given industry, the proportion of commodities produced by the industry. The underlying assumption is that each industry makes commodities in its own fixed proportions (product-mix matrix).

R is the column-standardized pure-commodity flow matrix (in coefficient form). It is a commodity-by-commodity matrix in which entries in each column show, for a given commodity, the amount of each commodity used by that commodity per dollar of its output (pure-commodity technology matrix).

i is a column vector that consists of ones.

$\hat{}$ transforms a column vector into a diagonal matrix, with zeros on all of the off-diagonal elements.

' transforms a matrix into its transpose.

SECONDARY-PRODUCT METHODOLOGIES

Data on both inputs and outputs are available on an establishment (industry) basis. However, many industries produce other commodities along with their primary commodity as their products. When the input-output tables are being constructed, establishments are classified into a particular industrial classification according to the commodity that makes up the largest part of their output. This commodity is considered to be the primary product of the establishment, while all

others are secondary products. Data are available to differentiate the primary and secondary outputs of each industry, whereas data on inputs are collected only for the whole of the industry, with no differentiation of the manner in which inputs are used in the production of the primary and secondary products. The specification of outputs by industries is contained in the Make matrix, while information on inputs by industries is contained in the Use matrix.

There are two main problems posed by this practical reality of multiproduction. The first problem involves a basic assumption of input-output analysis, that technological relationships established for the base year that link inputs to output will remain stable over a reasonable period of time (10-15 years) and through a range of output levels. This is the proportionality assumption, which should fail to hold only if there is a change in technology. If an industry is producing a heterogeneous group of commodities, a change in the proportion in which these commodities are produced will result in different technological coefficients without a change in the production function of any of the commodities. The stability of the technical coefficients will be improved by redefining the elements in the Use matrix, using the information provided in the Make matrix, in order to arrive at a pure commodity-by-commodity (or industry-by-industry) input-output table.

The second problem arises with respect to implementing the model. In its initial form, the input-output table is not a balanced table, because the rows denote commodities and the columns denote industries. This makes it impossible to solve the system for either commodity output

(Q) or industry output (X) in terms of the technology matrix (B) and a given final demand (Y), as can be seen from the basic accounting equation for the system:

$$Q = BX + Y$$

Hence, a necessity arises to transform the rows and columns of the input-output table to the same units of analysis.

There are four methodologies that have been used in dealing with secondary production and a fifth one that potentially can be used. Two of these methodologies involve fictitious transfers of outputs of secondary production. These include the Office of Business Economics (OBE) methodology used by the OBE in its input-output studies of the U.S. economy prior to and including 1967 (U.S. Department of Commerce, 1974, pp. 12-14), and the multiregional input-output (MRIO) methodology used in the 1963 MRIO study of the U.S. economy, which was undertaken by the Harvard Economic Research Project (Polenske, 1974, pp. 13-29). The other two methodologies are conceptually more satisfying as they transfer both outputs and inputs of the secondary production. The Bureau of Economic Analysis (BEA) methodology is based upon an industry-technology assumption concerning the transfer of secondary production from the producing to the primary industries. This methodology is used in the 1972 U.S. input-output study (U.S. Department of Commerce, 1980, pp. 37-42) and is again being used in the yet-to-be-completed 1977 U.S. input-output study. On the other hand, the United Nations (UN) methodology is based upon a commodity-technology assumption with respect to the technology of the secondary production. This is specified in the "System of National Accounts" (United Nations, 1968, pp. 35-51), and

most countries outside the United States use the UN methodology in constructing their input-output tables. The fifth, so-called RAS methodology, is based upon the use of the RAS technique that was developed at the Cambridge Growth Project for use in updating input-output tables. This methodology was proposed in the early stages of the multiregional policy impact simulation (MRPIS) project, to be used in balancing the input-output table. It involves the adjustment of the A (technology) matrix through the use of R and S control vectors for the sums of the rows and columns, hence is called RAS. For the present analysis, the RAS technique is used to balance the rows and columns of the Use matrix by changing entries along the rows and columns in an iterative process that leads to a unique estimate of the change in each entry due to secondary production.

OBE Methodology

When the Use matrix is used in the interindustry transactions part of the accounting table, a balanced table cannot be obtained; that is, the elements in the column vector (which represents the summation of the elements in the rows of the Use matrix and the final demand vector) are not equal to the corresponding elements of the row vector (which represents the summation of the elements in the columns of the Use matrix and the value added vector). The first summation vector gives the commodity output, the second gives the industry output, and there exists a difference between the two because of secondary production. The difference between any row and column sum of the accounts equals : (Commodity j produced by industry j plus commodity j produced by other industries) minus (commodity j produced by industry j plus other

commodities produced by industry j).

The way the OBE handled this problem in the earlier input-output studies of the U.S. economy is by adding the Use and the secondary matrices element by element. The difference between any row and column sum of the secondary matrix equals : (the amount of commodities other than j produced by industry j) minus (the amount of commodity j produced by industries other than industry j). This is the negative of the corresponding difference of the Use matrix. Hence, a balanced flow table is obtained. The addition of the two tables implies that the secondary products are transferred in the interindustry accounts (from the producing industries to the industries where the products are considered primary) and distributed through this channel. The secondary product, in other words, is treated as if it is a sale by the producing industry to the industry where it is primary.

There are two important drawbacks to this method. First, besides being confusing, these fictitious sales distort the technology (direct input coefficients) matrix and therefore the inverse (direct and indirect input coefficients) matrix. Assuming that industry i produces a considerable amount of commodity j and that this is shown as a sale to industry j, an increase in the demand for commodity j will increase the outputs of industry i and industries providing inputs to industry i through nonexisting interindustry effects. This result is, of course, undesirable. Second, the secondary products are double-counted. The units of the rows and the columns of the transactions table (which is U+N) do not exactly coincide with the industries. Along row j of the Use matrix, the secondary products that the primary industry of commodity j

produces are added to the output of commodity j when the Use and the secondary matrices are summed, but that part of commodity j that is produced elsewhere is not subtracted. In other words, the result is not a pure industry-by-industry flow table and this is the source of double-counting. It should be noted that the secondary products are assumed to share the technology of their producing industry. This is so because no attempt is made to transfer the inputs of the secondary products, but rather only the outputs are transferred.

Mathematically, the OBE model can be represented as follows:

$$Q + Ni = \phi\,(X + N'i) + Y$$

$$X + N'i = \phi\,(X + N'i) + Y$$

$$X + N'i = (I - \phi)^{-1} Y$$

$$X = (I - \phi)^{-1} Y - N'i \qquad (1)$$

$$Q = (I - \phi)^{-1} Y - Ni \qquad (2)$$

where ϕ is the column-standardized matrix of the total transactions: $(U + N)(X\,(U + N'i)^{-1}$, that is, the OBE technology matrix.

MRIO Methodology

The way the problem of secondary production is dealt with in the MRIO model is similar to that of the OBE method. Instead of combining the Use and the secondary matrices, as this obscures the technological relationships, the fictitious secondary production transactions are treated in the aggregate for each industry. There is a column in the MRIO accounts representing secondary transfers-out of each industry and a row representing secondary transfers-in to each industry. These vectors are shown in Figure 1.

						transfers-out vector
	0	n_{12}	n_{13}	. . .	n_{1m}	n_{10}
	n_{21}	0	n_{23}	. . .	n_{2m}	n_{20}
	n_{31}	n_{32}	0	. . .	n_{3m}	n_{30}
	.	.	.	.	.	.
	.	.	.	.	.	.
	.	.	.	.	.	.
	n_{m1}	n_{m2}	n_{m3}	. . .	0	n_{m0}
transfers-in vector	n_{01}	n_{02}	n_{03}	. . .	n_{0m}	

Figure 1. Secondary Transfers-In and Secondary Transfers-Out.

The row and column totals still double-count secondary production, but the MRIO methodology does not interfere with the derivation of the technological input structure of the industries directly. In fact, all the technological input requirements are equal to or less than the corresponding OBE one because all interindustry transactions in the MRIO methodology are less than or equal to the corresponding interindustry transaction in the OBE methodology, and before the Use matrix is column-standardized, the transfers-in row vector is added to the sum of the columns of the Use matrix of the MRIO methodology.

If the production of secondary products by establishments changes significantly over time, this method permits the alteration of the secondary product percentages without recalculating the inverse matrix,

because the transfers-out are treated exogenously. However, an estimate of the transfers-out vector (Ni) must be made for future years, which may require several iterations in order for the estimates to conform with the calculated outputs.

The mathematical representation of the MRIO methodology is as follows:

$$Q + Ni = \theta\,(X + N'i) + Ni + Y$$

$$X + N'i = \theta\,(X + N'i) + (Ni + Y)$$

$$X = (I - \theta)^{-1}(Ni + Y) - N'i \qquad (3)$$

$$Q = (I - \theta)^{-1}(Ni + Y) - Ni \qquad (4)$$

where θ is $U(X + N'i)^{-1}$, that is, the MRIO technology matrix.

RAS Methodology

An alternative way to treat the problem of imbalance due to secondary production is by distributing the difference between commodity and industry outputs using an iterative computer program. This is the least sophisticated methodology, as it ignores the information on secondary production (that is, the Make matrix) completely. In order to arrive at a pure commodity-by-commodity flow table, the column sums of the Use matrix (including the value added vector as a row) are constrained to be equal to the row vector of commodity output (rather than its initial sum of industry output), the row sums of the Use matrix are constrained to be equal to commodity output minus final demand for the interindustry portion, the elements in the value added row are constrained to be equal to aggregate value added (these are equal to the initial sums), and the final demand column vector is constrained to stay the same. Different constraints could be placed upon the system. If an

industry-by-industry table is desired for example, the column sums of the Use matrix would be constrained to be equal to industry output minus value added for the interindustry portion, the row sums of the Use matrix (including the final demand vector as a column) would be constrained to be equal to the column vector of industry output, the elements in the final demand column would be constrained to be equal to aggregate final demand, and the value added row vector would be constrained to stay the same because it already represents industry, rather than commodity, output. If a solution can be found with an acceptable maximum error, it becomes the RAS flow matrix. The technology matrix ($\emptyset$) can be found by column-standardizing the flow matrix.

The equation for final commodity output is straight forward:

$$Q = \emptyset\, Q + Y$$

$$Q = (I - \emptyset)^{-1} Y$$

Pure Tables

Unlike the above formulations, the BEA and UN methodologies are used to obtain either commodity-by-commodity or industry-by-industry flow tables through redefinitions. This requires the simultaneous transfer of the inputs and outputs of the secondary products to their primary industry from their producing industry. The equations for the accounting framework are as follows:

$$Q = Ui + Y \qquad (5)$$

$$X = U'i + V \qquad (6)$$

$$Q = M'i \qquad (7)$$

$$X = Mi \qquad (8)$$

The following three relationships can be formed, using the coefficient

matrices described in the first part of the report:

$$U = B\hat{X} \qquad (9)$$

$$M = D\hat{Q} \qquad (10)$$

$$M' = C\hat{X} \qquad (11)$$

Although equations (1)-(4) are identities, equations (5)-(7) are assumptions when used in future years. Whether equation (6) or (7) is used (that is, whether the market-shares assumption or the product-mix assumption is used) determines whether the industry-technology or the commodity-technqlogy assumption, respectively, is being used with respect to the secondary production. The use of industry-technology (implied by the market-shares assumption) means that the technology of a secondary product is identical to that of its producing industry. On the other hand, the use of commodity-technology (implied by the product-mix assumption) means that all similar commodities have identical technologies no matter which industry produces them. This is not the same as saying that the technology of the secondary product is identical with its primary industry because the latter contains its own secondary production of other commodities and hence is "polluted". However, such a shifting of inputs from the input column of a given industry to that of the others can have the effect of introducing negatives, either because the assumption of the uniformity of input patterns for similar products may be invalid at a particular level of aggregation or because the data are inaccurate.

The BEA has adopted the industry-technology approach, while the UN has adopted the commodity-technology approach. The mathematical properties of both systems will be examined below. Alternative

accounting structures for these methodologies will be presented in Appendix 1.

BEA Methodology

When the BEA methodology is used, not only the outputs, but also the inputs, of the secondary products are shifted from their producing industry into their primary industry, using the assumption that the technology for producing the secondary product is the same as that of its producing industry. Specifically, this is done as follows: Every industry possibly produces some amount of commodity j. Taking the direct requirement by each industry of commodity i, and weighting this amount by the proportion of that industry's output of commodity j will result in the direct requirement by commodity j for commodity i. (The weights are the market-shares of each industry in the production of commodity j.) This procedure can be represented for the direct requirement by commodity j for commodity i (r_{ij}) as:

$$r_{ij} = b_{i1} \cdot d_{1j} + b_{i2} \cdot d_{2j} + \ \cdots \ + b_{im} \cdot d_{mj}$$

In matrix form, it becomes:

$$R_{BEA} = B\ D$$

The actual pure-commodity flows can be obtained by postmultiplying BD by $\hat{Q}$.

$$P_{BEA} = B\ D\ \hat{Q}$$

Formally, the system of equations of the BEA method is derived from (5), (8), (9), and (10) :

$$Q = Ui + Y$$

$$Q = BX + Y$$

$$Q = BDQ + Y$$

$$Q = (I - BD)^{-1}Y \qquad (12)$$

$$X = D\,(I - BD)^{-1}Y$$

$$X = (I - DB)^{-1}DY \qquad (13)$$

where $(I - BD)^{-1}$ is the commodity-by-commodity total requirements matrix, giving commodity output required per dollar of each commodity delivered to final demand, and

$(I - DB)^{-1}$ is the industry-by-industry total requirements matrix, giving industry output required per dollar of output of each industry delivered to final demand.

In the case of equation 13, the final demand is not defined with respect to commodities, but with respect to industry outputs, which is obtained through multiplying the final demand vector by the market-shares matrix. An alternative way of looking at the inverse is the form $(I - DB)^{-1}D$, which is the industry-by-commodity total requirements matrix, giving the industry output required per dollar of each commodity delivered to final demand. (DB is the pure-industry technology matrix.)

The BEA methodology permits working with Use and Make matrices that are rectangular, in other words, with a classification system where primary outputs of each industry are divided into several commodities. Because information on inputs into industries and on outputs of industries are available in considerable product detail, a more disaggregated study can be conducted without having to disaggregate industries that would have posed problems with the classification of establishments with large proportions of secondary output. This would be appropriate especially if certain commodities had similar production functions, but different supply and demand patterns. The rectangular Use

and Make matrices, when standardized and multiplied, result in a square technology matrix (BD), which can be used in computing the inverse matrix. Rectangular matrices cannot be used with the UN methodology, however, because this methodology would require the inversion of the rectangular product-mix matrix (C), which is impossible.

UN Methodology

For the use of the UN methodology, it is assumed that the primary-product technologies apply to all primary products, no matter which industry produces them. Starting with a column of the Use matrix (that is, with an industry), the procedure is to subtract the inputs associated with secondary products produced by this industry from its column, under the assumption that a given commodity has the same technology no matter which industry produces it, and to add the inputs associated with the secondary products produced by other industries and whose primary industry is the industry denoted at the top of the column. Unlike the BEA methodology, the technologies that are assumed for secondary production are not known beforehand. However, there is a unique commodity-by-commodity technology matrix (R_{UN}) that satisfies the commodity technology assumption and whose corresponding flow matrix (P_{UN}) adds to the total commodity production when summed over both its rows and columns.

This procedure can be intuitively presented in the following way. Suppose that R_{UN}, the pure commodity-by-commodity technology matrix (based on the commodity-technology assumption), is known. The direct requirement by industry j for commodity i, b_{ij}, can be obtained by calculating the weighted average of the direct requirements by each of

the commodities that is produced by industry j for commodity i, the weights being the proportion that industry j produces of the various commodities. This can be represented for the direct requirement by industry j for commodity i (b_{ij}) as follows:

$$b_{ij} = r_{i1} \cdot c_{1j} + r_{i2} \cdot c_{2j} + \cdots + r_{im} \cdot c_{mj}$$

In matrix form, this becomes:

$$B = R_{UN}\, C$$

or

$$R_{UN} = B\, C^{-1}$$

where R_{UN} is the UN pure-commodity technology matrix. The actual pure-commodity flows can be obtained by postmultiplying BC^{-1} by $\hat{Q}$.

$$P_{UN} = B\, C^{-1}\hat{Q}$$

Such a flow table will be balanced, because both rows and columns denote commodities. Formally, the system may be represented as follows, using (5), (7), (9), and (11):

$$Q = Ui + Y$$

$$Q = BX + Y$$

$$Q = BC^{-1}Q + Y$$

$$Q = (I - BC^{-1})^{-1}Y \qquad (14)$$

$$X = C^{-1}(I - BC^{-1})^{-1}Y$$

$$X = (I - C^{-1}B)^{-1}C^{-1}Y \qquad (15)$$

where $(I - BC^{-1})^{-1}$ is the commodity-by-commodity total requirements matrix, giving commodity output required per dollar of each commodity delivered to final demand.

The pure-commodity technology matrix BC^{-1} is identical to $U((M')^{-1})$:

$$BC^{-1} = (U\hat{X}^{-1})\, C$$

$$BC^{-1} = U\,(\hat{X}^{-1}C^{-1})$$

$$BC^{-1} = U\,(C\hat{X})^{-1}$$

$$BC^{-1} = U\,(M')^{-1}$$

and the pure-commodity flow matrix can alternatively be presented as:

$$U\,(M')^{-1}\hat{Q} = U\,(M^{-1})'\,\hat{Q}$$

$$U\,(M')^{-1}\hat{Q} = U\,(\hat{Q}M^{-1})'$$

$$U\,(M')^{-1}\hat{Q} = U\,((M\hat{Q}^{-1})^{-1})'$$

$$U\,(M')^{-1}\hat{Q} = U\,(D^{-1})'$$

$$U\,(M')^{-1}\hat{Q} = U\,(D')^{-1}$$

As mentioned earlier, this treatment of secondary production may cause negatives in the UN commodity-technology matrix BC^{-1}. Koenig and Ritz (1967), and Almon (1972) suggest two alternative ways of getting rid of these "nonsense" terms. However, the discussion of these methods is beyond the scope of this report.

Mixed Technology Assumptions

The assumptions for the technologies of the secondary products are very rigid both in the BEA and UN methods. It is assumed that all such production has been produced either under the assumption of industry-technology or under the assumption of commodity-technology. However, it would be more reasonable to expect different kinds of secondary production to comply with different technology assumptions. While a distinct secondary production is more likely to share the technology of its own category of commodities, by-products of an industrial process are more likely to share the technology of their producing industry. It is possible to divide the secondary production through the use of appropriate technology assumptions into two Make

matrices, in order to obtain a hybrid-technology pure-commodity flow matrix. Because this matrix will be a weighted combination of the BEA and UN flow matrices, and because its calculation requires engineering knowledge of the production process, it will not be considered in the next section.

IMPLEMENTATION OF THE ALTERNATIVE METHODOLOGIES

In this section, 1963 U.S. national input-output data (Polenske, 1977) will be used to calculate the inverse matrices at the 19-industry and 78-industry aggregation levels. The differences in the multipliers, as well as the differences in the generated commodity outputs, using 1972 final demand, will be compared. The industrial classification at the 19-industry and 78-industry levels is given in Appendix 2.

19-Industry Level

The data from which the five different inverses are calculated, that is, the commodity-by-industry Use matrix (including the value added vector as its last row), industry-by-commodity Make matrix, and the final demand vector, are printed in Appendix 3, along with the calculated UN, BEA, and RAS commodity-by-commodity flow matrices, and the five inverses. The first 29 rows and columns represent the 29 industries listed in Appendix 2. The twentieth row in the Use and flow matrices account for the value added. The last row and column in these matrices, as well as in the Make matrix, give the total column and row sums respectively. For the flow matrices, the row sums plus the final demand vector equal the transpose of the column sums (both sum to total commodity output). The last row of the final demand vector gives the total final demand (gross

national income). The entry in the twenty-first row and twentieth column in the Use and flow matrices shows the grand total of commodity (and also industry) output. The units used are millions of 1963 dollars.

There are a few negative flows in the UN flow matrix, indicating the inappropriateness of the commodity-technology assumption for certain secondary production. For example, it can be seen from the Use matrix that Industry 8 (Transport. equip. and ordnance) uses its own product as an input almost twice as much as it uses Commodity 15 (Machinery and equipment). On the other hand, Industry 15 barely uses Commodity 8 as an input. Consequently, when the inputs to its secondary production of transportation equipment and ordnance are subtracted from Industry 15 under the commodity-technology assumption, the use of Commodity 8 by Commodity 15 in the UN pure-commodity flow matrix becomes negative. This is an extreme case where the commodity-technology assumption clearly fails. Indeed, the corresponding entry in the UN inverse matrix is the only negative multiplier. Although this negative multiplier is small in magnitude (-0.0026), it causes a logical inconsistency, because the elasticity of substitution is zero within the input-output framework, and therefore the increase in demand for a given commodity cannot result in decreasing production for any of its inputs. The same multiplier has the values of 0.0120, 0.0348, 0.0031, and 0.0035 in the BEA, OBE, MRIO, and RAS inverses, respectively, a significant variation.

Industry 6 (Construction), neither has any secondary production, nor is its product produced by another industry. Consequently, the input column of Industry 6 in the Use matrix and the input columns of Commodity 6 in the BEA and UN flow matrices are identical. However, the

corresponding columns in the BEA and UN inverse matrices are not identical, because of the different interindustry linkages that exist under the two methodologies.

Because value added is specified for industries in the Use matrix, the redefinitions of the BEA and UN methodologies change the original value added figures in accordance with their technology assumptions. The choice of technology assumption can have a significant effect on the amount of value added specified for certain commodities, which then affects the level of technological coefficients for these commodities. For commodities 1 (Livestock and livestock prdts.), 9 (Lumber and paper), 10 (Petroleum, related ind.), and 18 (Gas, water, and sanitary serv.), the BEA flow matrix has significantly larger value added figures (by about ten percent) compared with the UN flow matrix. The direct requirements for these commodities are significantly larger in the UN treatment.

Appendix 4 contains the cell-by-cell comparisons of the four inverses with respect to the MRIO inverse, as well as the comparison between the UN and BEA inverses. Given two inverse matrices, the comparisons in Appendix 4 show the percentage difference of the entries in each cell of the first inverse matrix with respect to the second. The MRIO inverse is chosen as the deflator matrix in the first four comparisons, because it contains the smallest entries overall. The matrices in Appendix 4 make it possible to compare the percentage variations of the multipliers of all methodologies, taking the MRIO multipliers as a base. The calculations suggest that there are considerable differences between the inverses if individual multipliers

are compared. For example, nearly a fifth of the corresponding multipliers of the BEA and UN inverses have differences larger than ten percent.

A direct comparison of multipliers, however, is not sufficient. First, the OBE and MRIO systems involve the subtraction of a transfers-out vector when calculating outputs. Moreover, the MRIO method has the transfers-out vector as an additional component of its final demand vector. Conceptually, only the comparison of the BEA and UN inverses does not pose any problem, because the meaning of their multipliers is well-defined for both methodologies, and both are multiplied by the same final demand vector to generate commodity outputs.

The second reason why only comparing the inverses is unsatifactory is that, it is hard to tell the cumulative effects of the multipliers on outputs. To this end, the 1972 final demand from the 1972 U.S. input-output study will be used to calculate outputs with each methodology (U.S. Department of Commerce, 1979). The 1972 final demand, actual 1972 commodity output, and the 1972 transfers-out vector are shown in Table 1. (All the 1972 data used are in millions of 1972 dollars.) The 1963 market-shares coefficients and 1972 actual commodity output are used to estimate the transfers-out vector, which is used in the OBE and MRIO calculations. The generated outputs by the five methodologies are printed in Table 2. (For Tables 1 through 4, the first 19 rows represent commodities corresponding to the industries listed in Appendix 2. The last row represents the row sums for Tables 1 and 2 and total percentage difference for Tables 3 and 4.)

The estimated outputs are all very similar when compared with the

Table 1

1972 FINAL DEMAND, COMMODITY OUTPUT, AND ESTIMATED
TRANSFERS-OUT VECTOR (19-INDUSTRY LEVEL), IN MILLIONS OF DOLLARS

Industry No.	Final Demand	Commodity Output	Transfers-Out
1	2081.	40963.	3958.
2	10603.	34793.	5637.
3	772.	5440.	36.
4	129.	19493.	1114.
5	525.	8214.	629.
6	139003.	165998.	0.
7	123300.	205075.	3162.
8	84447.	111802.	4682.
9	25136.	81684.	17001.
10	15778.	33537.	3343.
11	25446.	80383.	2955.
12	2297.	21988.	1178.
13	1473.	38877.	2844.
14	1265.	25944.	1519.
15	101249.	201440.	8665.
16	518247.	807802.	10454.
17	32168.	77771.	603.
18	9970.	26826.	187.
19	14850.	31971.	100.
20	1108739.	2020001.	68065.

Table 2

ESTIMATED 1972 COMMODITY OUTPUTS
(19-INDUSTRY LEVEL), IN MILLIONS OF DOLLARS

INDUSTRY NO.	BEA OUTPUT	UN OUTPUT	OBE OUTPUT	MRIO OUTPUT	RAS OUTPUT
1	37981.	37450.	37788.	38078.	37518.
2	38820.	38294.	38619.	38929.	38366.
3	4992.	4979.	4992.	4994.	4994.
4	21029.	20627.	21062.	21044.	20870.
5	10275.	10254.	10287.	10270.	10249.
6	169821.	169857.	169822.	169840.	169837.
7	192951.	192424.	192852.	193058.	192511.
8	120920.	120772.	120942.	120911.	120834.
9	87685.	87433.	86972.	87962.	87228.
10	35366.	35242.	35341.	35390.	35317.
11	80939.	80745.	80910.	81020.	80710.
12	23950.	23939.	23992.	23951.	23933.
13	47214.	47205.	47233.	47199.	47172.
14	27205.	27194.	27238.	27179.	27176.
15	202029.	202002.	202181.	202034.	201953.
16	773170.	773057.	773199.	773419.	773140.
17	77978.	77826.	77950.	78027.	77888.
18	27095.	26807.	27101.	27101.	27030.
19	31837.	31845.	31834.	31847.	31844.
20	2011258.	2007952.	2010316.	2012253.	2008578.

Table 3

PERCENTAGE DIFFERENCE BETWEEN ESTIMATED AND
ACTUAL COMMODITY OUTPUTS (19-INDUSTRY LEVEL)

INDUSTRY NO.	BEA	UN	OBE	MRIO	RAS
1	-7.3	-8.6	-7.8	-7.0	-8.4
2	11.6	10.1	11.0	11.9	10.3
3	-8.2	-8.5	-8.2	-8.2	-8.2
4	7.9	5.8	8.0	8.0	7.1
5	25.1	24.8	25.2	25.0	24.8
6	2.3	2.3	2.3	2.3	2.3
7	-5.9	-6.2	-6.0	-5.9	-6.1
8	8.2	8.0	8.2	8.1	8.1
9	7.3	7.0	6.5	7.7	6.8
10	5.5	5.1	5.4	5.5	5.3
11	0.7	0.5	0.7	0.8	0.4
12	8.9	8.9	9.1	8.9	8.8
13	21.4	21.4	21.5	21.4	21.3
14	4.9	4.8	5.0	4.8	4.8
15	0.3	0.3	0.4	0.3	0.3
16	-4.3	-4.3	-4.3	-4.3	-4.3
17	0.3	0.1	0.2	0.3	0.2
18	1.0	-0.1	1.0	1.0	0.8
19	-0.4	-0.4	-0.4	-0.4	-0.4
20	-0.4	-0.6	-0.5	-0.4	-0.6

Table 4

PERCENTAGE DIFFERENCE BETWEEN THE ESTIMATED
COMMODITY OUTPUTS OF ALL METHODOLOGIES (19-INDUSTRY LEVEL)

INDUSTRY NO.	BEA/RAS	UN/RAS	OBE/RAS	MRIO/RAS	BEA/MRIO
1	1.2	-0.2	0.7	1.5	-0.3
2	1.2	-0.2	0.7	1.5	-0.3
3	-0.0	-0.3	-0.0	0.0	-0.0
4	0.8	-1.2	0.9	0.8	-0.1
5	0.3	0.0	0.4	0.2	0.1
6	-0.0	0.0	-0.0	0.0	-0.0
7	0.2	-0.0	0.2	0.3	-0.1
8	0.1	-0.1	0.1	0.1	0.0
9	0.5	0.2	-0.3	0.8	-0.3
10	0.1	-0.2	0.1	0.2	-0.1
11	0.3	0.0	0.2	0.4	-0.1
12	0.1	0.0	0.2	0.1	-0.0
13	0.1	0.1	0.1	0.1	0.0
14	0.1	0.1	0.2	0.0	0.1
15	0.0	0.0	0.1	0.0	-0.0
16	0.0	-0.0	0.0	0.0	-0.0
17	0.1	-0.1	0.1	0.2	-0.1
18	0.2	-0.8	0.3	0.3	-0.0
19	-0.0	0.0	-0.0	0.0	-0.0
20	0.1	-0.0	0.1	0.2	-0.0

Table 4 (continued)

PERCENTAGE DIFFERENCE BETWEEN THE ESTIMATED
COMMODITY OUTPUTS OF ALL METHODOLOGIES (19-INDUSTRY LEVEL)

INDUSTRY NO.	UN/MRIO	OBE/MRIO	BEA/OBE	UN/OBE	BEA/UN
1	-1.7	-0.8	0.5	-0.9	1.4
2	-1.6	-0.8	0.5	-0.8	1.4
3	-0.3	-0.0	0.0	-0.3	0.3
4	-2.0	0.1	-0.2	-2.1	1.9
5	-0.2	0.2	-0.1	-0.3	0.2
6	0.0	-0.0	-0.0	0.0	-0.0
7	-0.3	-0.1	0.1	-0.2	0.3
8	-0.1	0.0	-0.0	-0.1	0.1
9	-0.6	-1.1	0.8	0.5	0.3
10	-0.4	-0.1	0.1	-0.3	0.4
11	-0.3	-0.1	0.0	-0.2	0.2
12	-0.0	0.2	-0.2	-0.2	0.0
13	0.0	0.1	-0.0	-0.1	0.0
14	0.1	0.2	-0.1	-0.2	0.0
15	-0.0	0.1	-0.1	-0.1	0.0
16	-0.0	-0.0	-0.0	-0.0	0.0
17	-0.3	-0.1	0.0	-0.2	0.2
18	-1.1	0.0	-0.0	-1.1	1.1
19	-0.0	-0.0	0.0	0.0	-0.0
20	-0.2	-0.1	0.0	-0.1	0.2

actual output. This suggests that technological change has occurred over the time period. The percentage differences in estimated and actual commodity outputs are shown in Table 3. According to the differences, Industry 2 (Other agricultural prdts.), Industry 5 (Other mining), and Industry 13 (Primary iron, steel mfr.) have undergone the largest changes in technology. Total commodity output estimates, however, are 0.4 to 0.6 percent less than the actual total commodity output. This, apart from technological change, suggests that there has been some increase in the total roundaboutness, that is, in the interindustry linkages in the economy. While there are larger differences between the estimated and actual outputs, in the aggregate, the estimated outputs of all methodologies are within 0.2 percent of each other. At the 19-industry level of aggregation, secondary production makes up approximately 3.4 percent of total production (total of the transfers-out vector divided by the total of the commodity output vector). The largest difference between the estimated outputs (that of the MRIO and UN methodologies) accounts for approximately 7.5 percent of total secondary production, a small figure considering the different ways secondary products are treated with each methodology.

In order to determine the discrepancies in the disaggregate commodity output level, the percentage differences of the outputs are calculated between each methodology (resulting in a total of ten comparisons). These are reproduced in Table 4. The largest difference between the output estimates of the BEA and MRIO methodologies for any commodity is 0.3 percent, and these methodologies generate the closest estimates. The UN estimates, due to the different technology assumption

of this methodology with respect to the others, are relatively apart and smaller than the estimates of the other methodologies.

The variation in the estimated output of a given commodity, from one methodology to another, is to an extent correlated with the transfers-out ratio of the commodity to its total output, in other words to the proportion of secondary production within the primary industry of that commodity. Industry 6 (Construction), for example, does not have any secondary production, and the percentage difference in estimated outputs of this industry between all methodologies is less than .05 percent. Industry 1 (Livestock and livestock prdts.) and Industry 2 (Other agricultural prdts.) have 9.7 percent and 16.2 percent secondary production, respectively, and constitute the largest variations. On the other hand, Industry 18 (Gas, water, and sanitary serv.) has negligible secondary production and relatively large differences in the estimates by the five methodologies for its product. This is because of the large transfers-in ratio of this commodity. However, Industry 19 (Electric utilities), which has a transfers-in ratio and transfers-out ratio similar to those of Industry 18, has almost no variation in the estimates of its product by different methodologies. This suggests that the differences that will occur in the estimates of the different methodologies cannot be deduced from the Make matrix. Comparison of the outputs of the UN and BEA methodologies, which is the only valid comparison with respect to the technology of the secondary-product, suggests that except for Industries 1 (Livestock and livestock prdts.), 2 (Other agricultural prdts.), 4 (Crude petro., natural gas), and 18 (Gas, water, and sanitary serv.), the industry-technology and

commodity-technology assumptions do not result in significantly different output results. Even for the above industries, the largest difference is less than two percent.

In the light of the above calculations, it can be concluded that, at the 19-industry classification level, the choice of secondary production methodology with respect to the implementation of the U.S. 1963 input-output model (and therefore very likely the latest, 1977 input-output model) will not result in significant differences in the output estimates, although there may be such differences in the individual direct requirements and inverse multipliers.

78-Industry Level

At the 19-industry level, a considerable amount of the secondary production that exists at lower levels of aggregation does not show up. Because input-output models are usually implemented at more disaggregated levels than 19-industries, similar computations and analysis as to that done with the 19-industry level was undertaken at 78-industry level here. Data from the same source, except now at the 78-industry level, were used. The Use and Make matrices, the final demand vector, and the BEA, UN, and RAS flow matrices are printed in Appendix 5. The first 78 rows and columns represent the 78 industries, or their primary commodities listed in Appendix 2. The seventy-ninth row in the Use and flow matrices account for value added. The last row and column in these matrices give the total column and row sums, respectively. The units are in millions of 1963 dollars. Appendix 6 contains the five different inverses.

The UN flow matrix contains a considerable number of negative flows. While at the 19-industry level, the negative flows add to 860

million dollars, at the 78-industry level these add to more than three billion dollars. Moreover, some of these flows are large compared to the commodity output, especially for Commodities 67 (Radio and TV broadcasting) and 78 (State and local govt. enterp.). Commodity 68, in particular, has a negative value added figure in the UN flow matrix that is three times as large as its actual output. This is due to the unusually low ratio (0.03) of the output of Commodity 67 to the output of Industry 67, which mainly produces Commodity 73 (Business serv.). When the inputs used in producing Commodity 73 are subtracted from Industry 67 according to the commodity-technology assumption, the remaining inputs are subjected to gross errors relative to the remaining output.

The negative multipliers in the UN inverse at the 78-industry level pose a more serious problem when compared with the 19-industry level. However, although there are many negative multipliers in the UN inverse, they are all smaller than 0.1 in absolute value, with the exception of the negative entries in the columns of Commodity 67 and 78. The positive value of 12.4338 in the seventy-fifth row of the column of Commodity 67, on the other hand, is clearly "nonsense", a consequence of the unusually low ratio of commodity output to industry output, explained above.

The last column in the inverse matrices represents the row sums. It can be interpreted as the amount of impact on the production of a given commodity that will occur if the final demand for each commodity increased by one unit. The grand total of the last row and column of each inverse matrix is the impact of such an increase in final demand on total commodity production. These grand totals can be regarded as an

indicator of the amount of linkage in the economy captured by the inverses. As expected, the MRIO inverse has the smallest such indicator (143), because that part of the linkages caused by secondary production is treated exogenously. The OBE inverse has the largest grand total (161), but the effect of capturing more linkages is offset by the subtraction of the transfers-out vector. The figure for the UN inverse (161) is biased, largely because of the "nonsense" entry of 12.4338 at the seventy-fifth row and sixty-seventh column, besides the other unusually high, as well as negative, entries. Subtraction of this single largest entry from the grand total of the UN inverse matrix places the indicator for the captured interindustry linkages for it at just below the indicator for the BEA inverse, which has a grand total of 152.

In Appendix 7, the multipliers of the four inverses are compared cell-by-cell in terms of percentage differences with the MRIO multipliers. Percentage comparisons of multipliers between the UN and BEA inverses are also contained in Appendix 7. Comparisons indicate that there are larger differences between the multipliers at this level of aggregation than was the case at the 19-industry level. Whereas only a fifth of the corresponding multipliers of the BEA and UN inverses have differences of more than ten percent at the 19-industry level, half of the corresponding multipliers of these matrices have differences more than ten percent at the 78-industry level. The larger percentage differences are concentrated on specific rows of the inverse matrices, suggesting that the choice of methodology affects the distribution of the outputs of a given commodity more than it does the input structure of that commodity.

In order to see how these differences in multipliers translate into differences in estimated outputs, 1972 final demand is used to generate commodity outputs with the five methodologies. The 1972 final demand, actual commodity output, and the estimated transfers-out vector are shown in Table 5. The source of the data is the same as the 1972 19-industry level data (U.S. Department of Commerce, 1979). The outputs generated by the five methodologies are reproduced in Table 6. (For Tables 5-8, the first 78 rows represent commodities corresponding to the industries listed in Appendix 2. The last row represents the row sums for Tables 5 and 6, and total percentage difference for Tables 7 and 8.)

The transfers-out vector shows that secondary production has increased by almost 75 percent from its 19-industry level, to above 5 percent of the total production. The aggregate commodity output estimates of the BEA, UN, and RAS methodologies have all increased from their 19-industry level estimates, in the order of three billion dollars. This is due to increased interindustry linkages that can be captured at lower levels of aggregation. The aggregate commodity production estimates of the OBE and MRIO methodologies have moved in opposite ways from their respective 19-industry level estimates, because of the different ways these methodologies are subject to an increase in the transfers-out vector. The aggregate OBE estimate has been reduced by about half a billion dollars, because of the effect of the subtraction of a larger transfers-out vector in its estimation of commodity production at the 78-industry level. On the other hand, the aggregate estimate of commodity production by the MRIO methodology has increased by a little less than five billion dollars, because of the similar treatment of the

Table 5

1972 FINAL DEMAND, COMMODITY OUTPUT, AND ESTIMATED TRANSFERS-OUT VECTOR (79-INDUSTRY LEVEL), IN MILLIONS OF DOLLARS

INDUSTRY NO.	FINAL DEMAND	COMMODITY OUTPUT	TRANSFERS-OUT
1	2081.	40963.	3793.
2	10603.	34793.	5484.
3	446.	3397.	0.
4	207.	4158.	15.
5	85.	1914.	28.
6	251.	2622.	63.
7	772.	5440.	33.
8	129.	19493.	1114.
9	67.	3090.	161.
10	122.	588.	381.
11	129581.	129581.	0.
12	9422.	36417.	0.
13	6685.	7019.	776.
14	79923.	125479.	2202.
15	7141.	9302.	24.
16	1433.	18105.	1445.
17	2487.	6685.	384.
18	23778.	32803.	498.
19	3238.	5896.	290.
20	1927.	23720.	441.
21	19.	462.	76.
22	6880.	7465.	303.
23	3294.	3936.	211.
24	4175.	21210.	789.
25	256.	7960.	234.
26	8585.	16931.	17596.
27	4634.	27232.	2431.
28	873.	9792.	1310.
29	13593.	17599.	1154.
30	357.	3565.	276.
31	15778.	33537.	3057.
32	5989.	22195.	1274.
33	117.	1207.	30.
34	5183.	5598.	169.
35	1080.	5978.	125.
36	1217.	16010.	1089.
37	1473.	38877.	2828.
38	1265.	25944.	1441.
39	89.	4789.	158.
40	2437.	15703.	1305.
41	1327.	11539.	985.
42	3176.	16797.	1335.
43	3039.	5897.	564.
44	4989.	5937.	719.
45	6330.	7824.	797.
46	1949.	2967.	361.
47	4911.	7756.	737.
48	5647.	6782.	813.
49	3419.	8596.	1214.
50	429.	4482.	346.
51	7201.	8842.	1189.
52	3623.	8153.	710.

Table 5 (continued)

1972 FINAL DEMAND, COMMODITY OUTPUT, AND ESTIMATED TRANSFERS-OUT VECTOR (79-INDUSTRY LEVEL), IN MILLIONS OF DOLLARS

INDUSTRY NO.	FINAL DEMAND	COMMODITY OUTPUT	TRANSFERS-OUT
53	5091.	11043.	1456.
54	6222.	7232.	1800.
55	1507.	5652.	586.
56	16359.	20074.	2198.
57	1986.	9205.	736.
58	2158.	4388.	551.
59	51795.	73468.	2270.
60	13384.	17131.	3081.
61	12583.	14184.	703.
62	4756.	7556.	1186.
63	5080.	7105.	405.
64	9524.	13121.	1625.
65	32168.	77771.	566.
66	17457.	30665.	1351.
67	0.	4.	5582.
68	24820.	58797.	245.
69	194412.	263964.	2240.
70	42304.	77634.	2189.
71	117082.	174919.	34.
72	21881.	30291.	926.
73	15847.	88191.	1401.
74	14262.	24551.	202.
75	8641.	12731.	549.
76	80375.	84930.	125.
77	3288.	9568.	2564.
78	2045.	2799.	12189.
79	1108739.	2020001.	109515.

Table 6

ESTIMATED 1972 COMMODITY OUTPUTS
(79-INDUSTRY LEVEL), IN MILLIONS OF DOLLARS

INDUSTRY NO.	BEA OUTPUT	UN OUTPUT	OBE OUTPUT	MRIO OUTPUT	RAS OUTPUT
1	37010.	36514.	36833.	37131.	36529.
2	38131.	37644.	37723.	38249.	37664.
3	3217.	3235.	3217.	3221.	3216.
4	3073.	2996.	3073.	3099.	3010.
5	2841.	2844.	2841.	2838.	2838.
6	2670.	2665.	2686.	2661.	2667.
7	4972.	4958.	4972.	4976.	4963.
8	21090.	20792.	21132.	21052.	21033.
9	3848.	3844.	3862.	3847.	3842.
10	845.	837.	872.	845.	837.
11	129581.	129581.	129581.	129581.	129581.
12	39869.	40138.	39869.	39924.	39901.
13	6960.	6926.	6969.	6957.	6945.
14	112743.	112441.	112699.	112844.	112504.
15	9824.	9822.	9824.	9827.	9824.
16	21563.	21511.	21562.	21565.	21497.
17	6927.	6955.	6946.	6932.	6917.
18	30246.	30229.	30246.	30248.	30230.
19	5888.	5900.	5904.	5888.	5886.
20	22370.	22449.	22394.	22424.	22358.
21	688.	680.	685.	691.	682.
22	8184.	8181.	8178.	8185.	8182.
23	3839.	3839.	3846.	3839.	3841.
24	25440.	25370.	25453.	26015.	25194.
25	8485.	8486.	8504.	8520.	8456.
26	18721.	18715.	16122.	19066.	18691.
27	28939.	28847.	29057.	29054.	28774.
28	10742.	10770.	10730.	10752.	10734.
29	18002.	18026.	18017.	18008.	18011.
30	4863.	4878.	4869.	4873.	4865.
31	35271.	35182.	35404.	35312.	35250.
32	19432.	19445.	19510.	19467.	19409.
33	1723.	1707.	1721.	1725.	1714.
34	5801.	5798.	5797.	5803.	5799.
35	5703.	5707.	5704.	5709.	5699.
36	18233.	18246.	18283.	18232.	18236.
37	47847.	47950.	47906.	47853.	47883.
38	26878.	26893.	26944.	26867.	26891.
39	3912.	3898.	3909.	3915.	3893.
40	17220.	17250.	17149.	17222.	17231.
41	9411.	9421.	9449.	9421.	9420.
42	17362.	17379.	17420.	17385.	17338.
43	5487.	5559.	5511.	5486.	5507.
44	5859.	5855.	5870.	5864.	5857.
45	7872.	7874.	7902.	7869.	7874.
46	3148.	3155.	3153.	3149.	3152.
47	9784.	9786.	9809.	9784.	9804.
48	6900.	6894.	6922.	6906.	6892.
49	9107.	9124.	9089.	9104.	9117.
50	4152.	4140.	4170.	4151.	4172.
51	9144.	9253.	9073.	9162.	9189.
52	6062.	6075.	6090.	6065.	6063.

Table 6 (continued)

ESTIMATED 1972 COMMODITY OUTPUTS
(79-INDUSTRY LEVEL), IN MILLIONS OF DOLLARS

INDUSTRY NO.	BEA OUTPUT	UN OUTPUT	OBE OUTPUT	MRIO OUTPUT	RAS OUTPUT
53	11282.	11305.	11277.	11289.	11284.
54	7393.	7395.	7236.	7397.	7393.
55	5785.	5799.	5769.	5789.	5786.
56	19733.	19629.	19695.	19738.	19665.
57	8020.	7961.	8025.	8031.	7948.
58	4615.	4632.	4641.	4617.	4620.
59	82415.	82411.	82391.	82426.	82431.
60	17856.	17644.	17853.	17855.	17745.
61	14418.	14471.	14434.	14419.	14436.
62	8140.	8146.	8141.	8146.	8149.
63	7087.	7102.	7089.	7121.	7092.
64	13883.	13897.	13762.	13906.	13883.
65	78036.	77974.	78027.	78168.	77970.
66	30319.	30216.	30133.	30413.	30314.
67	69.	51.	-795.	74.	74.
68	59469.	59321.	59479.	59530.	59439.
69	255071.	255028.	255028.	255242.	255035.
70	74984.	75010.	74951.	75068.	74992.
71	173800.	173659.	173796.	174100.	173813.
72	26592.	26588.	26513.	26616.	26591.
73	74509.	74531.	74501.	74736.	74528.
74	22287.	22292.	22284.	22308.	22289.
75	13128.	12062.	13082.	13424.	12892.
76	83730.	83725.	83729.	83743.	83734.
77	10490.	10578.	10451.	10536.	10485.
78	2796.	2797.	2816.	2798.	2796.
79	2013782.	2010886.	2009759.	2017047.	2011445.

Table 7

PERCENTAGE DIFFERENCE BETWEEN ESTIMATED AND ACTUAL COMMODITY OUTPUTS (79-INDUSTRY LEVEL)

INDUSTRY NO.	BEA	UN	OBE	MRIO	RAS
1	-9.6	-10.9	-10.1	-9.4	-10.8
2	9.6	8.2	8.4	9.9	8.3
3	-5.3	-4.8	-5.3	-5.2	-5.3
4	-26.1	-28.0	-26.1	-25.5	-27.6
5	48.4	48.6	48.4	48.3	48.3
6	1.8	1.6	2.4	1.5	1.7
7	-8.6	-8.9	-8.6	-8.5	-8.8
8	8.2	6.7	8.4	8.0	7.9
9	24.5	24.4	25.0	24.5	24.4
10	43.7	42.3	48.2	43.6	42.3
11	0.0	0.0	0.0	0.0	0.0
12	9.5	10.2	9.5	9.6	9.6
13	-0.8	-1.3	-0.7	-0.9	-1.1
14	-10.2	-10.4	-10.2	-10.1	-10.3
15	5.6	5.6	5.6	5.6	5.6
16	19.1	18.8	19.1	19.1	18.7
17	3.6	4.0	3.9	3.7	3.5
18	-7.8	-7.8	-7.8	-7.8	-7.8
19	-0.1	0.1	0.1	-0.1	-0.2
20	-5.7	-5.4	-5.6	-5.5	-5.7
21	48.9	47.1	48.2	49.5	47.6
22	9.6	9.6	9.5	9.6	9.6
23	-2.5	-2.5	-2.3	-2.5	-2.4
24	19.9	19.6	20.0	22.7	18.8
25	6.6	6.6	6.8	7.0	6.2
26	10.6	10.5	-4.8	12.6	10.4
27	6.3	5.9	6.7	6.7	5.7
28	9.7	10.0	9.6	9.8	9.6
29	2.3	2.4	2.4	2.3	2.3
30	36.4	36.8	36.6	36.7	36.5
31	5.2	4.9	5.6	5.3	5.1
32	-12.4	-12.4	-12.1	-12.3	-12.6
33	42.7	41.5	42.6	42.9	42.0
34	3.6	3.6	3.5	3.7	3.6
35	-4.6	-4.5	-4.6	-4.5	-4.7
36	13.9	14.0	14.2	13.9	13.9
37	23.1	23.3	23.2	23.1	23.2
38	3.6	3.7	3.9	3.6	3.7
39	-18.3	-18.6	-18.4	-18.3	-18.7
40	9.7	9.8	9.2	9.7	9.7
41	-18.4	-18.4	-18.1	-18.4	-18.4
42	3.4	3.5	3.7	3.5	3.2
43	-6.9	-5.7	-6.5	-7.0	-6.6
44	-1.3	-1.4	-1.1	-1.2	-1.3
45	0.6	0.6	1.0	0.6	0.6
46	6.1	6.3	6.3	6.1	6.2
47	26.1	26.2	26.5	26.1	26.4
48	1.7	1.7	2.1	1.8	1.6
49	5.9	6.1	5.7	5.9	6.1
50	-7.4	-7.6	-7.0	-7.4	-6.9
51	3.4	4.6	2.6	3.6	3.9
52	-25.6	-25.5	-25.3	-25.6	-25.6

Table 7 (continued)

PERCENTAGE DIFFERENCE BETWEEN ESTIMATED AND ACTUAL COMMODITY OUTPUTS (79-INDUSTRY LEVEL)

INDUSTRY NO.	BEA	UN	OBE	MRIO	RAS
53	2.2	2.4	2.1	2.2	2.2
54	2.2	2.3	0.1	2.3	2.2
55	2.4	2.6	2.1	2.4	2.4
56	-1.7	-2.2	-1.9	-1.7	-2.0
57	-12.9	-13.5	-12.8	-12.8	-13.7
58	5.2	5.5	5.8	5.2	5.3
59	12.2	12.2	12.1	12.2	12.2
60	4.2	3.0	4.2	4.2	3.6
61	1.7	2.0	1.8	1.7	1.8
62	7.7	7.8	7.7	7.8	7.8
63	-0.3	-0.0	-0.2	0.2	-0.2
64	5.8	5.9	4.9	6.0	5.8
65	0.3	0.3	0.3	0.5	0.3
66	-1.1	-1.5	-1.7	-0.8	-1.1
67	1626.4	1177.2	-19982.1	1748.8	1750.2
68	1.1	0.9	1.2	1.2	1.1
69	-3.4	-3.4	-3.4	-3.3	-3.4
70	-3.4	-3.4	-3.5	-3.3	-3.4
71	-0.6	-0.7	-0.6	-0.5	-0.6
72	-12.2	-12.2	-12.5	-12.1	-12.2
73	-15.5	-15.5	-15.5	-15.3	-15.5
74	-9.2	-9.2	-9.2	-9.1	-9.2
75	3.1	-5.3	2.8	5.4	1.3
76	-1.4	-1.4	-1.4	-1.4	-1.4
77	9.6	10.6	9.2	10.1	9.6
78	-0.1	-0.1	0.6	-0.0	-0.1
79	-0.3	-0.5	-0.5	-0.1	-0.4

Table 8

PERCENTAGE DIFFERENCE BETWEEN THE ESTIMATED COMMODITY OUTPUTS OF ALL METHODOLOGIES (79-INDUSTRY LEVEL)

INDUSTRY NO.	BEA/RAS	UN/RAS	OBE/RAS	MRIO/RAS	BEA/MRIO
1	1.3	-0.0	0.8	1.6	-0.3
2	1.2	-0.1	0.2	1.6	-0.3
3	0.0	0.6	0.0	0.1	-0.1
4	2.1	-0.5	2.1	3.0	-0.8
5	0.1	0.2	0.1	-0.0	0.1
6	0.1	-0.1	0.7	-0.2	0.3
7	0.2	-0.1	0.2	0.3	-0.1
8	0.3	-1.1	0.5	0.1	0.2
9	0.1	0.1	0.5	0.1	0.0
10	1.0	-0.0	4.1	0.9	0.1
11	0.0	0.0	0.0	0.0	0.0
12	-0.1	0.6	-0.1	0.1	-0.1
13	0.2	-0.3	0.3	0.2	0.0
14	0.2	-0.1	0.2	0.3	-0.1
15	-0.0	-0.0	-0.0	0.0	-0.0
16	0.3	0.1	0.3	0.3	-0.0
17	0.1	0.5	0.4	0.2	-0.1
18	0.1	-0.0	0.1	0.1	-0.0
19	0.0	0.2	0.3	0.0	-0.0
20	0.1	0.4	0.2	0.3	-0.2
21	0.9	-0.3	0.4	1.3	-0.4
22	0.0	-0.0	-0.0	0.0	-0.0
23	-0.0	-0.1	0.1	-0.0	0.0
24	1.0	0.7	1.0	3.3	-2.2
25	0.3	0.3	0.6	0.8	-0.4
26	0.2	0.1	-13.7	2.0	-1.8
27	0.6	0.3	1.0	1.0	-0.4
28	0.1	0.3	-0.0	0.2	-0.1
29	-0.0	0.1	0.0	-0.0	-0.0
30	-0.0	0.3	0.1	0.2	-0.2
31	0.1	-0.2	0.4	0.2	-0.1
32	0.1	0.2	0.5	0.3	-0.2
33	0.5	-0.4	0.4	0.6	-0.1
34	0.0	-0.0	-0.0	0.1	-0.0
35	0.1	0.1	0.1	0.2	-0.1
36	-0.0	0.1	0.3	-0.0	0.0
37	-0.1	0.1	0.0	-0.1	-0.0
38	-0.1	0.0	0.2	-0.1	0.0
39	0.5	0.1	0.4	0.6	-0.1
40	-0.1	0.1	-0.5	-0.1	-0.0
41	-0.1	0.0	0.3	0.0	-0.1
42	0.1	0.2	0.5	0.3	-0.1
43	-0.4	0.9	0.1	-0.4	0.0
44	0.0	-0.0	0.2	0.1	-0.1
45	-0.0	0.0	0.4	-0.1	0.0
46	-0.1	0.1	0.0	-0.1	-0.0
47	-0.2	-0.2	0.1	-0.2	0.0
48	0.1	0.0	0.4	0.2	-0.1
49	-0.1	0.1	-0.3	-0.1	0.0
50	-0.5	-0.8	-0.1	-0.5	0.0
51	-0.5	0.7	-1.3	-0.3	-0.2
52	-0.0	0.2	0.4	0.0	-0.0

Table 8 (continued)

PERCENTAGE DIFFERENCE BETWEEN THE ESTIMATED
COMMODITY OUTPUTS OF ALL METHODOLOGIES (79-INDUSTRY LEVEL)

INDUSTRY NO.	BEA/RAS	UN/RAS	OBE/RAS	MRIO/RAS	BEA/MRIO
53	-0.0	0.2	-0.1	0.0	-0.1
54	-0.0	0.0	-2.1	0.0	-0.1
55	-0.0	0.2	-0.3	0.1	-0.1
56	0.3	-0.2	0.2	0.4	-0.0
57	0.9	0.2	1.0	1.0	-0.1
58	-0.1	0.2	0.5	-0.1	-0.0
59	-0.0	-0.0	-0.0	-0.0	-0.0
60	0.6	-0.6	0.6	0.6	0.0
61	-0.1	0.2	-0.0	-0.1	-0.0
62	-0.1	-0.0	-0.1	-0.0	-0.1
63	-0.1	0.1	-0.0	0.4	-0.5
64	-0.0	0.1	-0.9	0.2	-0.2
65	0.1	0.0	0.1	0.3	-0.2
66	0.0	-0.3	-0.6	0.3	-0.3
67	-6.7	-31.0	-1174.6	-0.1	-6.6
68	0.1	-0.2	0.1	0.2	-0.1
69	0.0	-0.0	-0.0	0.1	-0.1
70	-0.0	0.0	-0.1	0.1	-0.1
71	-0.0	-0.1	-0.0	0.2	-0.2
72	0.0	-0.0	-0.3	0.1	-0.1
73	-0.0	0.0	-0.0	0.3	-0.3
74	-0.0	0.0	-0.0	0.1	-0.1
75	1.8	-6.4	1.5	4.1	-2.2
76	-0.0	-0.0	-0.0	0.0	-0.0
77	0.0	0.9	-0.3	0.5	-0.4
78	0.0	0.0	0.7	0.1	-0.1
79	0.1	-0.0	-0.1	0.3	-0.2

Table 8 (continued)

PERCENTAGE DIFFERENCE BETWEEN THE ESTIMATED
COMMODITY OUTPUTS OF ALL METHODOLOGIES (79-INDUSTRY LEVEL)

INDUSTRY NO.	UN/MRIO	OBE/MRIO	BEA/OBE	UN/OBE	BEA/UN
1	-1.7	-0.8	0.5	-0.9	1.4
2	-1.6	-1.4	1.1	-0.2	1.3
3	0.4	-0.1	-0.0	0.5	-0.5
4	-3.3	-0.8	-0.0	-2.5	2.6
5	0.2	0.1	-0.0	0.1	-0.1
6	0.1	0.9	-0.6	-0.8	0.2
7	-0.4	-0.1	-0.0	-0.3	0.3
8	-1.2	0.4	-0.2	-1.6	1.4
9	-0.1	0.4	-0.4	-0.4	0.1
10	-0.9	3.2	-3.0	-4.0	1.0
11	0.0	0.0	0.0	0.0	0.0
12	0.5	-0.1	-0.0	0.7	-0.7
13	-0.4	0.2	-0.1	-0.6	0.5
14	-0.4	-0.1	0.0	-0.2	0.3
15	-0.1	-0.0	0.0	-0.0	0.0
16	-0.3	-0.0	0.0	-0.2	0.2
17	0.3	0.2	-0.3	0.1	-0.4
18	-0.1	-0.0	0.0	-0.1	0.1
19	0.2	0.3	-0.3	-0.1	-0.2
20	0.1	-0.1	-0.1	0.2	-0.4
21	-1.6	-0.9	0.5	-0.7	1.2
22	-0.0	-0.1	0.1	0.0	0.0
23	-0.0	0.2	-0.2	-0.2	0.0
24	-2.5	-2.2	-0.0	-0.3	0.3
25	-0.4	-0.2	-0.2	-0.2	-0.0
26	-1.8	-15.4	16.1	16.1	0.0
27	-0.7	0.0	-0.4	-0.7	0.3
28	0.2	-0.2	0.1	0.4	-0.3
29	0.1	0.1	-0.1	0.1	-0.1
30	0.1	-0.1	-0.1	0.2	-0.3
31	-0.4	0.3	-0.4	-0.6	0.3
32	-0.1	0.2	-0.4	-0.3	-0.1
33	-1.0	-0.2	0.1	-0.8	0.9
34	-0.1	-0.1	0.1	0.0	0.0
35	-0.0	-0.1	-0.0	0.1	-0.1
36	0.1	0.3	-0.3	-0.2	-0.1
37	0.2	0.1	-0.1	0.1	-0.2
38	0.1	0.3	-0.2	-0.2	-0.1
39	-0.4	-0.2	0.1	-0.3	0.4
40	0.2	-0.4	0.4	0.6	-0.2
41	-0.0	0.3	-0.4	-0.3	-0.1
42	-0.0	0.2	-0.3	-0.2	-0.1
43	1.3	0.4	-0.4	0.9	-1.3
44	-0.1	0.1	-0.2	-0.2	0.1
45	0.1	0.4	-0.4	-0.4	-0.0
46	0.2	0.1	-0.1	0.1	-0.2
47	0.0	0.3	-0.3	-0.2	-0.0
48	-0.2	0.2	-0.3	-0.4	0.1
49	0.2	-0.2	0.2	0.4	-0.2
50	-0.3	0.5	-0.4	-0.7	0.3
51	1.0	-1.0	0.8	2.0	-1.2
52	0.2	0.4	-0.5	-0.2	-0.2

Table 8 (continued)

PERCENTAGE DIFFERENCE BETWEEN THE ESTIMATED
COMMODITY OUTPUTS OF ALL METHODOLOGIES (79-industry level)

INDUSTRY NO.	UN/MRIO	OBE/MRIO	BEA/OBE	UN/OBE	BEA/UN
53	0.1	-0.1	0.0	0.3	-0.2
54	-0.0	-2.2	2.2	2.2	-0.0
55	0.2	-0.4	0.3	0.5	-0.3
56	-0.6	-0.2	0.2	-0.3	0.5
57	-0.9	-0.1	-0.1	-0.8	0.7
58	0.3	0.5	-0.6	-0.2	-0.4
59	-0.0	-0.0	0.0	0.0	0.0
60	-1.2	-0.0	0.0	-1.2	1.2
61	0.4	0.1	-0.1	0.3	-0.4
62	0.0	-0.1	-0.0	0.1	-0.1
63	-0.3	-0.5	-0.0	0.2	-0.2
64	-0.1	-1.0	0.9	1.0	-0.1
65	-0.2	-0.2	0.0	-0.1	0.1
66	-0.6	-0.9	0.6	0.3	0.3
67	-30.9	-1175.4	-108.7	-106.4	35.2
68	-0.4	-0.1	-0.0	-0.3	0.2
69	-0.1	-0.1	0.0	0.0	0.0
70	-0.1	-0.2	0.0	0.1	-0.0
71	-0.3	-0.2	0.0	-0.1	0.1
72	-0.1	-0.4	0.3	0.3	0.0
73	-0.3	-0.3	0.0	0.0	-0.0
74	-0.1	-0.1	0.0	0.0	-0.0
75	-10.1	-2.5	0.4	-7.8	8.8
76	-0.0	-0.0	0.0	-0.0	0.0
77	0.4	-0.8	0.4	1.2	-0.8
78	-0.0	0.7	-0.7	-0.7	-0.0
79	-0.3	-0.4	0.2	0.1	0.1

transfers-out vector as final demand.

Table 7 shows the percentage differences between the estimated and actual commodity outputs. Although in the aggregate the estimates are all within 0.5 percent of the actual production, the figures in the table raise questions about the stability of the input-output coefficients, even within a time period of nine years, as about a third of the commodity output estimates of all methodologies have differences larger than ten percent when compared with the actual 1972 commodity outputs.

The discrepancies between the outputs of five methodologies are considerably larger at this level of aggregation, as can be seen from Table 8. The smallest differences are again those between the BEA and MRIO output estimates. The output estimates for Commodity 26 (Printing and publishing), 67 (Radio and TV broadcasting), and 75 (Amusements) show very high variations from one methodology to another. Of these, the first two (Commodities 26 and 67) have unusually high ratios of transfers-out to total commodity output. From Tables 4 and 8, it can be seen that, while at the 19-industry level, only five of the hundred and ninety comparisons indicate a difference larger than 1.5 percent, forty-eight of the seven hundred-and-eighty comparisons indicate such a difference at the 78-industry level. In percentage terms, the variations at the 78-industry level are more than two times as much as the variations at the 19-industry level. While the largest such difference (in absolute value) is 2.1 percent in Table 4, there are fifteen comparisons in Table 8 with percentage differences larger than four percent. The differences between the BEA and UN commodity output estimates show that, of the four commodities that had relatively larger

differences (over one percent) at the 19-industry level, three of those (which have not undergone disaggregation at the 78-industry level) have similar differences at the present level of aggregation. These are Commodities 1 (Livestock and livestock prdts.), 2 (Other agricultural prdts.), and 8 (Crude petro., natural gas). In addition to these, Commodities 4 (Agriculture serv.), 10 (Mineral mining), 21 (Wooden containers), 43 (Engines and turbines), 51 (Computing machines), 60 (Aircraft and parts), 67 (Radio and TV broadcasting), and 76 (Medical, educ. serv., and nonprofit org.) have percentage differences larger than one percent in the estimated commodity outputs of the BEA and UN methodologies.

CONCLUSION

At the 78-industry classification level, the choice of methodology will have significant impacts on the output estimates of certain commodities. These impacts are over a much larger group of commodities when compared with the 19-industry level variations, and the extent of variations are much more severe. Because of the technological change that took place from 1963 to 1972, it is not possible to choose between the methodologies by comparing their estimates with the actual commodity outputs. Some generalizations, however, can be made from the preceding analysis. The OBE and MRIO methodologies pose problems of consistency, because of their double-counting of the secondary production; and when the aggregation level is changed, because of the effects of the changing transfers-out vector. The UN methodology leads to a lot of "nonsense" terms in its inverse at 78-industry level, and therefore produces biased estimates for the corresponding commodities. The RAS methodology is

clearly inferior to all other methodologies, because of the information on the secondary production that goes unused. The BEA methodology, while not posing the above problems, makes the dubious assumption of industry-technology on the part of the secondary production. The most desirable treatment, on the other hand, would be to construct a hybrid-technology pure-commodity matrix through separating the secondary production into two Make matrices along the industry and commodity-technology assumptions, and giving special attention to the investigation of the secondary production technologies of the commodities specified above, whose estimates are subject to variation as a result of the technology assumption made.

Appendix 1

FAUCETT METHODOLOGY

Appendix 1

FAUCETT METHODOLOGY

In this appendix, two alternative accounting structures will be presented. They were proposed by Jack Faucett Associates, Inc. (Faucett); one produces identical results as the UN methodology and the other produces identical results as the BEA methodology. The investigation and implementation of the two alternatives is at the same level of simplification as the other methodologies presented in this report. It is assumed that there is only one region, and trade and transportation margins are ignored.

In the Faucett-UN methodology,

> the fundamental variables of the model are the primary product output of each industry and the total consumption of each product by both intermediate and final users. (Faucett, 1981, p. 1).

Because there is only one region, and net exports are part of final demand, total consumption equals total commodity output for each product. It is assumed that, for a given industry, secondary production is proportional to the primary-product production of that industry. Hence, the total output of the industry is proportional to its primary-product output. It follows that the secondary production of an industry is assumed to be proportional to its total production. This is the same as the product-mix assumption of the UN methodology. It is, then, possible to replace the fundamental variable of primary-product output by industry output.

The interindustry flow matrix is given by the following matrix F:

$$F = \begin{bmatrix} -M' & \hat{Q} \\ U & -\hat{Q} \end{bmatrix}$$

In order to arrive at the technology matrix, A, each column is standardized by the diagonal element in the column ($A_{ij} = F_{ij}/F_{jj}$). For the left half of the matrix, these elements are primary-product outputs. Because these are proportional to industry outputs, standardizing by the latter will yield the same results. The standardized matrix then becomes:

$$A = \begin{bmatrix} C & -I \\ -B & I \end{bmatrix}$$

Defining the output vector as $Z = \begin{bmatrix} X \\ Q \end{bmatrix}$, and the final demand vector as $W = \begin{bmatrix} O \\ Y \end{bmatrix}$, the following relationships can be formed, based on the proportionality assumption:

$$AZ = W$$

$$Z = A^{-1}W$$

If the inverse standardized matrix (A^{-1}) is partitioned into four parts in a similar way to the standardized matrix, then the lower right-hand side of the inverse is the Leontief multiplier for commodity output and the upper right hand side of the inverse is the Leontief multiplier for industry output, as shown below:

$$A^{-1} = \begin{bmatrix} K & L \\ M & N \end{bmatrix}$$

$$A * A^{-1} = I$$

$$\begin{bmatrix} C & -I \\ -B & I \end{bmatrix} \begin{bmatrix} K & L \\ M & N \end{bmatrix} = \begin{bmatrix} I & O \\ O & I \end{bmatrix}$$

This results in four equations involving the partitioned matrices:

$$CK - M = I$$

$$CL - N = O$$

$$-BK + M = O$$

$$-BL + N = I$$

which can be solved for L and N:

$$N = CL = I + BC$$

$$CL - BL = I$$

$$(C - B)\, L = I$$

$$L = (C - B)^{-1}$$

$$L = ((I - BC^{-1})C)^{-1}$$

$$L = C^{-1}\, (I - BC^{-1})^{-1}$$

$$N = CL$$

$$N = C\, C^{-1}(I - BC^{-1})^{-1}$$

$$N = (I - BC^{-1})^{-1}$$

This methodology was implemented at 19-industry and 78-industry levels, and identical results with the UN methodology were obtained.

Alternatively, the Faucett-BEA methodology may also be presented in a similar accounting structure. The fundamental variables are again the commodity and industry outputs. A similar flow matrix can be constructed whose row sums equal the column vector -W.

$$F^* = \begin{bmatrix} -X & M \\ U & -Q \end{bmatrix}$$

Standardization of each column by the diagonal element of the flow matrix gives the technology matrix:

$$A^* = \begin{bmatrix} I & -D \\ -B & I \end{bmatrix}.$$

In the above procedure, it is assumed that secondary production is proportional to the commodity output. This is the market-shares assumption of the BEA methodology. The input-output relation for future years is then given by

$$A^* Z = W$$

$$Z = A^{*-1} W$$

If the inverse matrix is partitioned, it can be shown that this treatment results in identical inverse matrices with the BEA methodology.

$$A^{*} * A^{*-1} = I$$

$$\begin{bmatrix} I & -D \\ -B & I \end{bmatrix} \begin{bmatrix} K & L \\ M & N \end{bmatrix} = \begin{bmatrix} I & O \\ O & I \end{bmatrix}$$

This results in four equations:

$$K - DM = I$$

$$-BK + M = O$$

$$L - DN = O$$

$$-BL + N = I$$

These may be solved for L and N, which represent the inverse matrices for industry output and commodity output respectively:

$$L = DN$$

$$-BDN + N = I$$

$$(I - BD)\, N = I$$

$$N = (I - BD)^{-1}$$

$$L = D\,(I - BD)^{-1}$$

This methodology, if implemented, would yield identical results with the BEA methodology.

Appendix 2

INDUSTRIAL CLASSIFICATIONS: 19 and 78 INDUSTRIES

Appendix 2

INDUSTRIAL CLASSIFICATIONS: 19 and 78 INDUSTRIES

Industry Number 19	78	Industry Title
1	1	Livestock & livestock prdts.
2	2	Other agricultural prdts.
3	7	Coal mining
4	8	Crude petro., natural gas
5		Other mining
	5	Iron & ferro. ores mining
	6	Nonferrous metal ores mining
	9	Stone & clay mining
	10	Chem. & fert. mineral mining
6		Construction
	11	New construction
	12	Maint. & repair construction
7		Food, tobacco, fabrics, & apparel
	14	Food & kindred prdts.
	15	Tobacco manufactures
	16	Fabrics
	17	Textile prdts.
	18	Apparel
	19	Misc. textile prdts.
	33	Leather tanning & prdts.
	34	Footwear, leather prdts.
8		Transport. equip. & ordnance
	13	Ordnance & accessories
	59	Motor vehicles, equip.
	60	Aircraft & parts
	61	Other transport. equip.
9		Lumber & paper
	20	Lumber & wood prdts.
	21	Wooden containers
	22	Household furniture
	23	Other furniture
	24	Paper & allied prdts.
	25	Paperboard containers
	26	Printing & publishing
10	31	Petroleum, related inds.
11		Plastics & chemicals
	27	Chemicals, selected prdts.
	28	Plastics & synthetics
	29	Drugs & cosmetics
	30	Paint & allied prdts.
	32	Rubber, misc. plastics

Appendix 2 (continued)

INDUSTRIAL CLASSIFICATIONS: 19 and 78 INDUSTRIES

Industry Number 19	78	Industry Title
12		Glass, stone, clay prdts.
	35	Glass & glass prdts.
	36	Stone & clay prdts.
13	37	Primary iron, steel, mfr.
14	38	Primary nonferrous mfr.
15		Machinery & equipment
	39	Metal containers
	40	Fabricated metal prdts.
	41	Screw mach. prdts., etc.
	42	Other fab. metal prdts.
	43	Engines & turbines
	44	Farm mach. & equip.
	45	Construction mach. & equip.
	46	Materials hand. mach. & equip.
	47	Metalworking mach. & equip.
	48	Special mach. & equip.
	49	General mach. & equip.
	50	Machine shop prdts.
	51	Office, computing machines
	52	Service industry machines
	53	Elect. transmission equip.
	54	Household appliances
	55	Electric lighting equip.
	56	Radio, TV, etc., equip.
	57	Electronic components
	58	Misc. electrical mach.
	62	Professional, scien. instru.
	63	Medical, photo. equip.
	64	Misc. manufacturing
16		Services
	3	Forestry & fishery prdts.
	4	Ag., for., & fish. services
	66	Communications, exc. brdcast.
	67	Radio & TV broadcasting
	69	Wholesale & retail trade
	70	Finance & insurance
	71	Real estate & rental
	72	Hotels, repair serv., exc. auto.
	73	Business services

Appendix 2 (continued)

INDUSTRIAL CLASSIFICATIONS: 19 and 78 INDUSTRIES

Industry Number 19	78	Industry Title
	74	Automobile repair & services
	75	Amusements
	76	Med., ed. serv., nonprof. org.
	77	Federal gov't. enterprises
	78	State & local gov't. enterprises
17	65	Transportation & warehousing
18		Gas, water, & sanitary services
	68.02	Gas utilities
	68.03	Water & sanitary services
19	68.01	Electric utilities

Appendix 3

1963 INPUT-OUTPUT DATA: CALCULATED FLOW AND INVERSE MATRICES (19-Industry Level)

Use Matrix

Make Matrix

Final Demand Vector

BEA Pure Flow

UN Pure Flow

RAS Flow Matrix

BEA Inverse Matrix

UN Inverse Matrix

OBE Inverse Matrix

MRIO Inverse Matrix

RAS Inverse Matrix

MATRIX : USE MATRIX

COLUMN / ROW	1	2	3	4	5	6	7	8	9	10
1	4750.	1820.	0.	0.	0.	2.	15679.	2.	2.	0.
2	7898.	769.	0.	1.	0.	330.	8475.	5.	6.	0.
3	6.	1.	410.	0.	9.	0.	59.	20.	82.	9.
4	0.	0.	0.	297.	0.	0.	0.	0.	0.	9411.
5	1.	120.	0.	0.	380.	737.	13.	2.	68.	68.
6	200.	367.	14.	379.	22.	25.	219.	106.	128.	349.
7	3593.	93.	3.	22.	8.	387.	31677.	748.	784.	40.
8	7.	18.	17.	3.	23.	60.	17.	16606.	7.	1.
9	21.	112.	19.	6.	23.	5114.	3329.	395.	14176.	175.
10	170.	954.	23.	64.	60.	1660.	267.	144.	240.	1622.
11	169.	1539.	71.	122.	217.	2054.	3819.	1458.	2030.	594.
12	7.	39.	3.	41.	10.	6397.	821.	514.	158.	33.
13	0.	0.	39.	30.	90.	2443.	11.	4477.	352.	1.
14	1.	1.	0.	0.	6.	1452.	5.	1397.	76.	46.
15	70.	309.	171.	205.	306.	12187.	2787.	8538.	1065.	151.
16	2215.	5335.	206.	2670.	515.	12252.	10100.	3788.	5751.	1587.
17	613.	321.	51.	308.	237.	2842.	3159.	994.	1491.	980.
18	13.	123.	2.	30.	52.	101.	258.	82.	180.	269.
19	83.	81.	63.	86.	113.	194.	497.	226.	332.	113.
20	6870.	15360.	1543.	7974.	3487.	37076.	40465.	23005.	22934.	5844.
21	26687.	27362.	2635.	12238.	5558.	85313.	121657.	62507.	49862.	21293.

MATRIX : USE MATRIX

COLUMN / ROW	11	12	13	14	15	16	17	18	19	20
1	4.	0.	0.	0.	5.	234.	3.	0.	0.	22501.
2	31.	8.	1.	1.	29.	125.	9.	1.	1.	17690.
3	105.	85.	469.	13.	26.	159.	9.	8.	628.	2098.
4	29.	0.	0.	0.	0.	39.	21.	1770.	50.	11617.
5	495.	808.	1252.	924.	12.	4.	1.	0.	0.	4885.
6	162.	56.	173.	44.	164.	10412.	1159.	359.	530.	14868.
7	1198.	97.	50.	54.	795.	2087.	217.	20.	20.	41893.
8	6.	3.	1.	1.	89.	1001.	569.	1.	1.	18431.
9	1113.	427.	72.	63.	1919.	4147.	119.	14.	19.	31263.
10	300.	87.	157.	82.	338.	2153.	1544.	70.	151.	10086.
11	9523.	502.	429.	292.	3240.	2417.	247.	30.	14.	28767.
12	248.	1323.	34.	36.	955.	340.	12.	0.	0.	10971.
13	161.	117.	4897.	34.	9552.	14.	225.	0.	0.	22443.
14	196.	36.	461.	4883.	4146.	14.	20.	0.	8.	12748.
15	999.	240.	1039.	332.	17368.	4024.	391.	4.	29.	50215.
16	4551.	934.	1518.	776.	8732.	60010.	4487.	553.	733.	126713.
17	1101.	630.	1181.	349.	1613.	3780.	3242.	165.	445.	23502.
18	373.	247.	283.	108.	196.	1632.	112.	4144.	496.	8701.
19	405.	174.	331.	217.	497.	3875.	138.	25.	664.	8314.
20	19389.	6403.	11703.	5596.	41575.	253085.	25582.	4806.	9177.	547874.
21	40389.	12177.	24051.	13805.	97251.	349552.	38107.	11970.	13166.	1015580.

MATRIX : MAKE MATRIX

COLUMN / ROW	1	2	3	4	5	6	7	8	9	10
1	24697.	0.	0.	0.	0.	0.	913.	0.	0.	0.
2	0.	24789.	0.	0.	0.	0.	106.	0.	170.	0.
3	0.	0.	2618.	0.	3.	0.	0.	0.	0.	0.
4	0.	0.	0.	11617.	0.	0.	0.	0.	0.	402.
5	0.	0.	1.	0.	5236.	0.	0.	0.	0.	12.
6	0.	0.	0.	0.	0.	85313.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	120201.	1.	48.	0.
8	0.	0.	0.	0.	0.	0.	1.	60250.	16.	0.
9	0.	0.	0.	0.	0.	0.	40.	7.	42237.	0.
10	0.	0.	0.	0.	15.	0.	1.	0.	1.	19652.
11	0.	0.	0.	0.	3.	0.	189.	78.	127.	75.
12	0.	0.	0.	0.	112.	0.	8.	8.	49.	22.
13	0.	0.	0.	0.	0.	0.	0.	55.	4.	0.
14	0.	0.	0.	0.	0.	0.	0.	47.	21.	4.
15	0.	0.	0.	0.	0.	0.	85.	1123.	288.	8.
16	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
17	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
18	0.	0.	0.	25.	0.	0.	0.	0.	0.	8.
19	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20	24697.	24789.	2619.	11642.	5369.	85313.	121544.	61569.	42961.	20183.

MATRIX : MAKE MATRIX

COLUMN / ROW	11	12	13	14	15	16	17	18	19	20
1	0.	0.	0.	0.	0.	1077.	0.	0.	0.	26687.
2	0.	0.	0.	0.	0.	2216.	81.	0.	0.	27362.
3	0.	0.	0.	0.	0.	13.	0.	0.	1.	2635.
4	3.	0.	0.	0.	0.	88.	0.	128.	0.	12238.
5	196.	69.	0.	1.	1.	38.	0.	0.	4.	5558.
6	0.	0.	0.	0.	0.	0.	0.	0.	0.	85313.
7	263.	2.	0.	0.	55.	1083.	0.	0.	4.	121657.
8	37.	6.	82.	70.	1795.	248.	0.	0.	2.	62507.
9	121.	23.	3.	0.	226.	7192.	0.	0.	13.	49862.
10	1053.	34.	0.	0.	14.	521.	0.	0.	2.	21293.
11	38938.	67.	0.	3.	261.	628.	0.	0.	20.	40389.
12	91.	11576.	12.	0.	119.	179.	0.	0.	1.	12177.
13	123.	1.	22664.	102.	973.	72.	0.	31.	26.	24051.
14	67.	3.	67.	13053.	480.	54.	0.	0.	9.	13805.
15	334.	84.	263.	185.	92958.	1918.	0.	0.	5.	97251.
16	17.	8.	0.	0.	0.	344300.	954.	2104.	2169.	349552.
17	0.	0.	0.	0.	0.	264.	37838.	0.	5.	38107.
18	34.	0.	11.	0.	0.	21.	0.	11871.	0.	11970.
19	0.	0.	0.	0.	0.	32.	0.	15.	13119.	13166.
20	41277.	11873.	23102.	13414.	96882.	359944.	38873.	14149.	15380.	1015580.

MATRIX : FINAL DEMAND

COLUMN	1
ROW	
1	2196.
2	7099.
3	521.
4	25.
5	484.
6	70445.
7	79651.
8	43138.
9	11698.
10	10097.
11	12510.
12	902.
13	659.
14	666.
15	46667.
16	233231.
17	15371.
18	5448.
19	7066.
20	547874.

MATRIX : BEA PURE FLOW

COLUMN	1	2	3	4	5	6	7	8	9	10
ROW										
1	4396.	1649.	0.	0.	0.	2.	15661.	2.	19.	0.
2	7309.	697.	0.	1.	0.	330.	8647.	5.	13.	0.
3	6.	1.	407.	0.	10.	0.	59.	21.	70.	9.
4	0.	0.	0.	286.	7.	0.	1.	0.	1.	8697.
5	1.	109.	0.	0.	366.	737.	16.	10.	65.	66.
6	185.	332.	14.	361.	22.	25.	226.	105.	112.	335.
7	3325.	84.	3.	21.	9.	387.	31428.	733.	684.	40.
8	6.	16.	17.	3.	22.	60.	17.	16007.	11.	1.
9	19.	101.	19.	6.	26.	5114.	3309.	408.	12021.	165.
10	157.	864.	23.	61.	59.	1660.	275.	144.	212.	1500.
11	156.	1394.	71.	116.	210.	2054.	3834.	1464.	1773.	572.
12	6.	35.	3.	39.	22.	6397.	815.	508.	144.	35.
13	0.	0.	39.	28.	86.	2443.	20.	4437.	329.	3.
14	1.	1.	0.	0.	6.	1452.	10.	1413.	85.	45.
15	65.	280.	170.	195.	291.	12187.	2778.	8436.	964.	151.
16	2050.	4833.	205.	2536.	495.	12252.	10110.	3768.	4955.	1565.
17	567.	291.	51.	293.	230.	2842.	3152.	983.	1278.	919.
18	12.	111.	2.	37.	51.	101.	258.	83.	156.	253.
19	77.	73.	63.	82.	108.	194.	497.	226.	286.	109.
20	6358.	13916.	1534.	7579.	3351.	37076.	40431.	22815.	19783.	5719.
21	24697.	24789.	2619.	11642.	5369.	85313.	121544.	61569.	42961.	20183.

MATRIX : BEA PURE FLOW

COLUMN / ROW	11	12	13	14	15	16	17	18	19	20
1	38.	0.	0.	0.	12.	710.	9.	1.	2.	22501.
2	48.	8.	1.	1.	32.	582.	12.	2.	2.	17690.
3	106.	81.	442.	14.	47.	178.	9.	10.	628.	2098.
4	498.	15.	2.	0.	6.	275.	21.	1759.	51.	11617.
5	511.	774.	1185.	879.	106.	55.	1.	2.	3.	4885.
6	179.	55.	164.	43.	171.	10343.	1180.	423.	593.	14868.
7	1232.	96.	51.	54.	812.	2645.	221.	33.	35.	41893.
8	17.	5.	23.	20.	562.	1061.	568.	7.	8.	18431.
9	1135.	417.	75.	64.	1928.	6238.	130.	39.	49.	31263.
10	376.	87.	150.	79.	341.	2308.	1542.	83.	165.	10086.
11	9251.	501.	417.	286.	3244.	3086.	256.	46.	35.	28767.
12	257.	1259.	37.	37.	946.	414.	13.	3.	3.	10971.
13	221.	122.	4647.	76.	9462.	292.	223.	7.	6.	22443.
14	233.	40.	471.	4628.	4194.	138.	20.	1.	12.	12748.
15	1064.	250.	1039.	361.	16915.	4581.	400.	32.	58.	50215.
16	4576.	917.	1465.	761.	8614.	60925.	4635.	940.	1111.	126713.
17	1148.	608.	1121.	339.	1652.	4136.	3230.	192.	470.	23502.
18	392.	237.	272.	104.	211.	1678.	116.	4121.	505.	8701.
19	408.	168.	315.	208.	509.	3908.	148.	50.	886.	8314.
20	19587.	6234.	11226.	5459.	47118.	256394.	26138.	6399.	10759.	547874.
21	41277.	11873.	23102.	13414.	96882.	359944.	38873.	14149.	15380.	1015580.

MATRIX : UN PURE FLOW

COLUMN / ROW	1	2	3	4	5	6	7	8	9	10
1	4630.	1805.	-0.	-0.	0.	2.	15854.	2.	-8.	0.
2	7833.	761.	-0.	1.	-0.	330.	8569.	4.	0.	-1.
3	5.	0.	410.	-0.	8.	0.	58.	18.	81.	6.
4	1.	2.	0.	86.	-6.	0.	1.	0.	6.	9666.
5	1.	120.	-0.	-1.	382.	737.	10.	-8.	66.	53.
6	167.	299.	14.	367.	20.	25.	188.	98.	-89.	338.
7	3346.	48.	3.	21.	2.	387.	32015.	746.	737.	6.
8	4.	10.	17.	3.	24.	60.	14.	16973.	-15.	-0.
9	-17.	26.	19.	2.	15.	5114.	3329.	358.	14321.	142.
10	162.	936.	23.	30.	58.	1660.	261.	138.	198.	1654.
11	133.	1512.	71.	114.	170.	2054.	3785.	1414.	1974.	340.
12	-0.	35.	3.	41.	1.	6397.	827.	505.	147.	23.
13	-0.	-2.	39.	30.	91.	2443.	4.	4371.	333.	-5.
14	1.	1.	-0.	-1.	5.	1452.	1.	1319.	66.	41.
15	37.	276.	171.	202.	307.	12187.	2788.	8378.	950.	119.
16	1953.	4915.	203.	2626.	492.	12252.	9983.	3649.	4541.	1410.
17	578.	283.	51.	287.	233.	2842.	3173.	975.	1430.	968.
18	9.	117.	2.	-20.	50.	101.	255.	77.	163.	264.
19	68.	55.	63.	83.	112.	194.	487.	216.	255.	98.
20	5788.	13591.	1532.	7773.	3407.	37076.	39943.	22333.	17804.	5060.
21	24697.	24789.	2619.	11642.	5369.	85313.	121544.	61569.	42961.	20183.

MATRIX : UN PURE FLOW

COLUMN	11	12	13	14	15	16	17	18	19	20
ROW										
1	-22.	-1.	0.	0.	-7.	245.	3.	0.	-0.	22501.
2	18.	7.	1.	1.	23.	130.	9.	1.	1.	17690.
3	109.	86.	476.	11.	18.	56.	9.	9.	736.	2098.
4	-7.	-11.	-5.	-2.	-2.	-295.	22.	2105.	56.	11617.
5	519.	819.	1268.	945.	-27.	4.	1.	-1.	0.	4885.
6	149.	51.	170.	42.	106.	10697.	1182.	426.	620.	14868.
7	1207.	92.	38.	48.	762.	2169.	221.	22.	23.	41893.
8	-18.	0.	-12.	-11.	-235.	1031.	584.	1.	1.	18431.
9	1113.	413.	48.	45.	1853.	4326.	119.	15.	22.	31263.
10	305.	84.	154.	81.	329.	2171.	1585.	82.	177.	10086.
11	10062.	480.	370.	263.	3223.	2509.	252.	25.	16.	28767.
12	249.	1355.	23.	31.	969.	354.	12.	-0.	-0.	10971.
13	135.	102.	4887.	-33.	9810.	9.	231.	-3.	0.	22443.
14	192.	31.	386.	4994.	4217.	13.	21.	-0.	9.	12748.
15	979.	210.	862.	238.	17886.	4191.	399.	2.	34.	50215.
16	4636.	885.	1420.	726.	8572.	62392.	4562.	642.	852.	126713.
17	1136.	631.	1178.	342.	1596.	3759.	3328.	193.	521.	23502.
18	389.	250.	272.	108.	187.	850.	114.	4939.	575.	8701.
19	416.	172.	327.	217.	478.	3893.	139.	29.	1012.	8314.
20	19709.	6218.	11238.	5369.	47125.	261441.	26081.	5662.	10724.	547874.
21	41277.	11873.	23102.	13414.	96882.	359944.	38873.	14149.	15380.	1015580.

MATRIX : RAS FLOW MATRIX

COLUMN / ROW	1	2	3	4	5	6	7	8	9	10
1	4460.	1714.	0.	0.	0.	2.	16056.	2.	2.	0.
2	7543.	737.	0.	1.	0.	347.	8827.	5.	5.	0.
3	5.	1.	395.	0.	8.	0.	56.	19.	67.	8.
4	0.	0.	0.	287.	0.	0.	0.	0.	0.	8982.
5	1.	112.	0.	0.	378.	754.	13.	2.	59.	66.
6	175.	322.	14.	352.	21.	24.	209.	101.	105.	320.
7	3314.	86.	3.	22.	8.	393.	31862.	748.	678.	39.
8	6.	17.	17.	3.	23.	61.	17.	16531.	6.	1.
9	20.	109.	20.	6.	24.	5461.	3518.	415.	12876.	178.
10	155.	872.	23.	62.	59.	1668.	266.	142.	205.	1549.
11	155.	1412.	72.	118.	213.	2071.	3811.	1447.	1741.	569.
12	6.	36.	3.	40.	10.	6431.	817.	509.	135.	32.
13	0.	0.	40.	29.	89.	2477.	11.	4468.	304.	1.
14	1.	1.	0.	0.	6.	1474.	5.	1396.	66.	44.
15	64.	283.	173.	198.	299.	12246.	2771.	8446.	910.	144.
16	1994.	4818.	206.	2548.	497.	12157.	9918.	3700.	4854.	1497.
17	558.	293.	52.	297.	231.	2852.	3138.	982.	1273.	935.
18	10.	100.	2.	26.	45.	90.	227.	72.	136.	228.
19	73.	72.	62.	80.	107.	189.	478.	216.	275.	104.
20	6156.	13805.	1537.	7573.	3351.	36615.	39546.	22366.	19265.	5486.
21	24697.	24709.	2619.	11642.	5369.	85313.	121544.	61569.	42961.	20183.

MATRIX : RAS FLOW MATRIX

COLUMN / ROW	11	12	13	14	15	16	17	18	19	20
1	4.	0.	0.	0.	5.	252.	3.	0.	0.	22500.
2	33.	8.	1.	1.	30.	137.	10.	1.	1.	17689.
3	103.	79.	432.	12.	25.	158.	9.	9.	713.	2098.
4	30.	0.	0.	0.	0.	41.	22.	2197.	60.	11618.
5	519.	810.	1235.	918.	12.	4.	1.	0.	0.	4885.
6	160.	53.	161.	41.	158.	10463.	1152.	428.	609.	14868.
7	1249.	97.	49.	53.	807.	2209.	227.	25.	24.	41892.
8	6.	3.	1.	1.	90.	1054.	593.	1.	1.	18431.
9	1219.	447.	74.	65.	2046.	4611.	131.	18.	24.	31263.
10	309.	86.	152.	80.	339.	2253.	1598.	87.	181.	10086.
11	9846.	496.	417.	286.	3263.	2538.	257.	37.	17.	28767.
12	256.	1303.	33.	35.	959.	356.	12.	0.	0.	10971.
13	167.	116.	4789.	33.	9670.	15.	235.	0.	0.	22443.
14	204.	36.	452.	4813.	4204.	15.	21.	0.	10.	12748.
15	1029.	236.	1007.	324.	17429.	4210.	405.	5.	35.	50215.
16	4631.	908.	1453.	748.	8653.	62002.	4586.	678.	865.	126713.
17	1133.	619.	1143.	340.	1617.	3950.	3351.	205.	531.	23502.
18	340.	215.	243.	93.	174.	1512.	103.	4559.	525.	8701.
19	404.	166.	310.	205.	483.	3923.	138.	30.	1000.	8314.
20	19634.	6195.	11149.	5365.	46919.	260242.	26020.	5867.	10784.	547875.
21	41277.	11873.	23102.	13414.	96882.	359944.	38873.	14149.	15380.	1015580.

MATRIX : BEA INVERSE

COLUMN / ROW	1	2	3	4	5	6	7	8	9	10
1	1.2887	0.0913	0.0020	0.0023	0.0022	0.0044	0.2345	0.0061	0.0081	0.0028
2	0.4109	1.0596	0.0017	0.0021	0.0019	0.0074	0.1747	0.0049	0.0064	0.0025
3	0.0018	0.0013	1.1872	0.0013	0.0050	0.0036	0.0025	0.0056	0.0046	0.0021
4	0.0160	0.0234	0.0090	1.0319	0.0134	0.0159	0.0108	0.0075	0.0092	0.4863
5	0.0045	0.0078	0.0043	0.0024	1.0775	0.0236	0.0046	0.0164	0.0063	0.0070
6	0.0279	0.0275	0.0149	0.0431	0.0143	1.0137	0.0182	0.0127	0.0148	0.0455
7	0.2431	0.0297	0.0086	0.0084	0.0096	0.0187	1.4012	0.0325	0.0390	0.0119
8	0.0035	0.0032	0.0127	0.0027	0.0087	0.0053	0.0034	1.3555	0.0032	0.0034
9	0.0265	0.0223	0.0233	0.0147	0.0191	0.1050	0.0681	0.0312	1.4030	0.0279
10	0.0313	0.0463	0.0163	0.0114	0.0190	0.0301	0.0184	0.0113	0.0141	1.0909
11	0.0599	0.0890	0.0529	0.0227	0.0654	0.0607	0.0840	0.0665	0.0852	0.0566
12	0.0067	0.0060	0.0050	0.0086	0.0081	0.0890	0.0144	0.0180	0.0085	0.0092
13	0.0069	0.0069	0.0380	0.0105	0.0348	0.0650	0.0105	0.1555	0.0224	0.0102
14	0.0042	0.0044	0.0099	0.0045	0.0101	0.0432	0.0062	0.0700	0.0100	0.0087
15	0.0314	0.0316	0.1068	0.0366	0.0843	0.1962	0.0569	0.2476	0.0524	0.0381
16	0.2987	0.3031	0.1557	0.2994	0.1677	0.2605	0.2535	0.1796	0.2394	0.2729
17	0.0560	0.0302	0.0375	0.0382	0.0628	0.0631	0.0611	0.0486	0.0580	0.0790
18	0.0090	0.0123	0.0066	0.0087	0.0199	0.0113	0.0108	0.0109	0.0123	0.0261
19	0.0120	0.0097	0.0346	0.0125	0.0278	0.0122	0.0132	0.0144	0.0154	0.0152

MATRIX : BEA INVERSE

COLUMN	11	12	13	14	15	16	17	18	19
ROW									
1	0.0123	0.0043	0.0023	0.0031	0.0046	0.0060	0.0032	0.0023	0.0018
2	0.0103	0.0041	0.0020	0.0027	0.0040	0.0053	0.0028	0.0022	0.0017
3	0.0059	0.0116	0.0306	0.0047	0.0057	0.0019	0.0014	0.0022	0.0519
4	0.0280	0.0153	0.0119	0.0116	0.0079	0.0077	0.0245	0.1872	0.0183
5	0.0209	0.0822	0.0745	0.1109	0.0186	0.0021	0.0027	0.0022	0.0021
6	0.0175	0.0167	0.0195	0.0151	0.0125	0.0381	0.0417	0.0556	0.0492
7	0.0603	0.0213	0.0105	0.0154	0.0224	0.0161	0.0135	0.0093	0.0071
8	0.0035	0.0040	0.0055	0.0062	0.0120	0.0057	0.0229	0.0028	0.0029
9	0.0624	0.0671	0.0180	0.0221	0.0461	0.0360	0.0167	0.0172	0.0149
10	0.0195	0.0173	0.0169	0.0170	0.0117	0.0116	0.0506	0.0148	0.0177
11	1.3056	0.0776	0.0455	0.0579	0.0690	0.0209	0.0198	0.0164	0.0124
12	0.0126	1.1224	0.0062	0.0082	0.0164	0.0057	0.0053	0.0065	0.0052
13	0.0188	0.0254	1.2676	0.0242	0.1555	0.0077	0.0161	0.0075	0.0073
14	0.0167	0.0116	0.0469	1.5338	0.0884	0.0046	0.0059	0.0039	0.0048
15	0.0567	0.0495	0.0886	0.0695	1.2370	0.0304	0.0317	0.0235	0.0230
16	0.2290	0.1712	0.1561	0.1617	0.1885	1.2356	0.1929	0.1900	0.1323
17	0.0544	0.0801	0.0820	0.0589	0.0445	0.0225	1.1022	0.0344	0.0447
18	0.0225	0.0379	0.0267	0.0232	0.0117	0.0103	0.0084	1.4148	0.0517
19	0.0194	0.0239	0.0252	0.0319	0.0152	0.0157	0.0084	0.0102	1.0654

MATRIX : UN INVERSE

COLUMN / ROW	1	2	3	4	5	6	7	8	9	10
1	1.3110	0.1005	0.0015	0.0016	0.0012	0.0037	0.2431	0.0058	0.0074	0.0016
2	0.4474	1.0669	0.0013	0.0015	0.0010	0.0068	0.1825	0.0046	0.0059	0.0015
3	0.0017	0.0012	1.1890	0.0012	0.0047	0.0037	0.0025	0.0058	0.0054	0.0018
4	0.0179	0.0259	0.0089	1.0113	0.0109	0.0160	0.0108	0.0069	0.0092	0.5335
5	0.0048	0.0084	0.0042	0.0022	1.0807	0.0244	0.0047	0.0169	0.0068	0.0059
6	0.0274	0.0266	0.0147	0.0429	0.0139	1.0133	0.0174	0.0125	0.0086	0.0477
7	0.2490	0.0291	0.0080	0.0075	0.0065	0.0181	1.4115	0.0327	0.0441	0.0081
8	0.0029	0.0024	0.0116	0.0022	0.0082	0.0027	0.0025	1.3814	0.0015	0.0029
9	0.0219	0.0167	0.0235	0.0126	0.0148	0.1106	0.0708	0.0299	1.5139	0.0251
10	0.0346	0.0501	0.0163	0.0082	0.0188	0.0302	0.0192	0.0112	0.0145	1.0986
11	0.0644	0.0968	0.0538	0.0216	0.0551	0.0614	0.0869	0.0665	0.1020	0.0411
12	0.0063	0.0058	0.0049	0.0087	0.0033	0.0896	0.0145	0.0181	0.0087	0.0088
13	0.0062	0.0062	0.0387	0.0104	0.0367	0.0656	0.0100	0.1585	0.0236	0.0094
14	0.0039	0.0042	0.0099	0.0042	0.0098	0.0442	0.0058	0.0699	0.0093	0.0082
15	0.0298	0.0309	0.1075	0.0365	0.0877	0.1964	0.0568	0.2507	0.0541	0.0367
16	0.2965	0.3110	0.1545	0.3022	0.1633	0.2599	0.2555	0.1776	0.2409	0.2779
17	0.0579	0.0304	0.0378	0.0365	0.0630	0.0640	0.0624	0.0494	0.0681	0.0826
18	0.0090	0.0127	0.0067	0.0006	0.0203	0.0116	0.0110	0.0112	0.0139	0.0245
19	0.0115	0.0090	0.0349	0.0125	0.0286	0.0123	0.0130	0.0144	0.0154	0.0150

MATRIX : UN INVERSE

COLUMN / ROW	11	12	13	14	15	16	17	18	19
1	0.0096	0.0035	0.0016	0.0025	0.0036	0.0033	0.0025	0.0015	0.0010
2	0.0083	0.0035	0.0014	0.0021	0.0032	0.0027	0.0023	0.0015	0.0011
3	0.0061	0.0124	0.0333	0.0042	0.0057	0.0015	0.0014	0.0020	0.0614
4	0.0115	0.0136	0.0124	0.0120	0.0071	0.0053	0.0269	0.2377	0.0225
5	0.0214	0.0875	0.0800	0.1230	0.0186	0.0017	0.0027	0.0018	0.0018
6	0.0159	0.0162	0.0200	0.0151	0.0115	0.0388	0.0420	0.0609	0.0516
7	0.0598	0.0201	0.0085	0.0136	0.0208	0.0130	0.0129	0.0075	0.0053
8	0.0012	0.0028	0.0019	0.0006	-0.0026	0.0053	0.0236	0.0017	0.0021
9	0.0651	0.0701	0.0146	0.0180	0.0462	0.0285	0.0157	0.0134	0.0117
10	0.0171	0.0172	0.0175	0.0176	0.0115	0.0108	0.0522	0.0151	0.0189
11	1.3381	0.0763	0.0412	0.0545	0.0693	0.0177	0.0188	0.0139	0.0103
12	0.0122	1.1320	0.0049	0.0069	0.0165	0.0054	0.0052	0.0068	0.0051
13	0.0148	0.0227	1.2824	0.0060	0.1618	0.0062	0.0165	0.0061	0.0066
14	0.0149	0.0099	0.0408	1.5982	0.0918	0.0037	0.0059	0.0035	0.0044
15	0.0531	0.0449	0.0774	0.0529	1.2469	0.0282	0.0316	0.0212	0.0214
16	0.2286	0.1667	0.1516	0.1569	0.1868	1.2363	0.1912	0.1759	0.1126
17	0.0543	0.0835	0.0861	0.0602	0.0445	0.0205	1.1053	0.0373	0.0491
18	0.0239	0.0429	0.0288	0.0261	0.0119	0.0067	0.0083	1.5380	0.0635
19	0.0199	0.0245	0.0262	0.0341	0.0151	0.0155	0.0082	0.0083	1.0747

MATRIX. : OBE INVERSE

COLUMN	1	2	3	4	5	6	7	8	9	10
ROW										
1	1.2914	0.0924	0.0025	0.0032	0.0028	0.0053	0.2457	0.0069	0.0090	0.0038
2	0.4131	1.0617	0.0028	0.0041	0.0032	0.0096	0.1778	0.0063	0.0127	0.0046
3	0.0018	0.0013	1.1872	0.0013	0.0055	0.0036	0.0025	0.0056	0.0046	0.0021
4	0.0168	0.0245	0.0094	1.0322	0.0139	0.0167	0.0114	0.0079	0.0096	0.5077
5	0.0048	0.0083	0.0050	0.0026	1.0780	0.0245	0.0052	0.0169	0.0067	0.0080
6	0.0279	0.0275	0.0149	0.0431	0.0143	1.0137	0.0182	0.0127	0.0147	0.0455
7	0.2444	0.0312	0.0095	0.0095	0.0106	0.0201	1.4026	0.0337	0.0416	0.0132
8	0.0044	0.0042	0.0150	0.0037	0.0106	0.0095	0.0048	1.3620	0.0052	0.0045
9	0.0327	0.0287	0.0270	0.0208	0.0230	0.1112	0.0741	0.0358	1.4096	0.0338
10	0.0332	0.0490	0.0179	0.0125	0.0238	0.0324	0.0210	0.0134	0.0167	1.0931
11	0.0612	0.0900	0.0538	0.0235	0.0669	0.0626	0.0871	0.0696	0.0894	0.0611
12	0.0071	0.0066	0.0055	0.0090	0.0295	0.0902	0.0150	0.0192	0.0104	0.0108
13	0.0075	0.0076	0.0394	0.0111	0.0361	0.0675	0.0115	0.1602	0.0233	0.0110
14	0.0046	0.0048	0.0106	0.0048	0.0108	0.0445	0.0067	0.0729	0.0109	0.0093
15	0.0341	0.0344	0.1091	0.0389	0.0869	0.2009	0.0607	0.2761	0.0627	0.0410
16	0.2931	0.3071	0.1625	0.3037	0.1761	0.2656	0.2585	0.1845	0.2450	0.2811
17	0.0562	0.0304	0.0376	0.0385	0.0629	0.0633	0.0612	0.0487	0.0583	0.0792
18	0.0091	0.0124	0.0067	0.0106	0.0200	0.0114	0.0109	0.0111	0.0124	0.0275
19	0.0120	0.0097	0.0346	0.0126	0.0279	0.0123	0.0132	0.0144	0.0154	0.0153

MATRIX : OBE INVERSE

COLUMN	11	12	13	14	15	16	17	18	19
ROW									
1	0.0135	0.0050	0.0029	0.0038	0.0053	0.0098	0.0040	0.0040	0.0030
2	0.0121	0.0057	0.0033	0.0039	0.0054	0.0130	0.0066	0.0052	0.0040
3	0.0059	0.0117	0.0307	0.0048	0.0057	0.0019	0.0014	0.0022	0.0520
4	0.0284	0.0160	0.0125	0.0122	0.0083	0.0084	0.0256	0.2009	0.0194
5	0.0271	0.0889	0.0749	0.1116	0.0190	0.0024	0.0028	0.0025	0.0026
6	0.0174	0.0167	0.0195	0.0151	0.0125	0.0381	0.0417	0.0555	0.0491
7	0.0691	0.0226	0.0114	0.0163	0.0241	0.0199	0.0144	0.0112	0.0088
8	0.0063	0.0060	0.0120	0.0156	0.0348	0.0074	0.0238	0.0036	0.0038
9	0.0711	0.0733	0.0218	0.0259	0.0530	0.0604	0.0214	0.0268	0.0228
10	0.0520	0.0230	0.0186	0.0191	0.0141	0.0140	0.0515	0.0160	0.0187
11	1.3075	0.0845	0.0463	0.0591	0.0729	0.0234	0.0206	0.0180	0.0150
12	0.0162	1.1248	0.0086	0.0108	0.0187	0.0065	0.0056	0.0069	0.0056
13	0.0234	0.0265	1.2694	0.0360	0.1685	0.0085	0.0167	0.0112	0.0098
14	0.0192	0.0124	0.0508	1.5356	0.0949	0.0050	0.0062	0.0043	0.0057
15	0.0693	0.0596	0.1044	0.0916	1.2429	0.0378	0.0340	0.0267	0.0258
16	0.2371	0.1828	0.1656	0.1711	0.1936	1.2399	0.2222	0.4016	0.2909
17	0.0545	0.0803	0.0822	0.0591	0.0446	0.0233	1.1025	0.0350	0.0455
18	0.0236	0.0380	0.0273	0.0234	0.0119	0.0104	0.0086	1.4160	0.0518
19	0.0195	0.0240	0.0253	0.0319	0.0152	0.0158	0.0085	0.0116	1.0655

MATRIX : MRIO INVERSE

COLUMN	1	2	3	4	5	6	7	8	9	10
ROW										
1	1.2873	0.0903	0.0014	0.0015	0.0015	0.0035	0.2306	0.0053	0.0063	0.0019
2	0.4094	1.0587	0.0012	0.0014	0.0012	0.0066	0.1695	0.0041	0.0049	0.0017
3	0.0017	0.0012	1.1871	0.0012	0.0045	0.0034	0.0023	0.0052	0.0043	0.0019
4	0.0148	0.0218	0.0080	1.0307	0.0104	0.0145	0.0091	0.0060	0.0074	0.4851
5	0.0041	0.0075	0.0038	0.0021	1.0753	0.0229	0.0041	0.0150	0.0054	0.0064
6	0.0273	0.0268	0.0143	0.0425	0.0132	1.0129	0.0172	0.0117	0.0138	0.0438
7	0.2414	0.0283	0.0076	0.0072	0.0080	0.0172	1.3972	0.0305	0.0366	0.0102
8	0.0031	0.0028	0.0118	0.0023	0.0078	0.0036	0.0027	1.3537	0.0024	0.0029
9	0.0235	0.0191	0.0213	0.0117	0.0154	0.1018	0.0647	0.0273	1.4007	0.0244
10	0.0307	0.0456	0.0158	0.0110	0.0178	0.0294	0.0173	0.0103	0.0130	1.0902
11	0.0581	0.0872	0.0515	0.0212	0.0620	0.0581	0.0808	0.0621	0.0812	0.0532
12	0.0064	0.0057	0.0047	0.0084	0.0050	0.0886	0.0139	0.0171	0.0078	0.0086
13	0.0059	0.0058	0.0368	0.0097	0.0331	0.0627	0.0091	0.1489	0.0197	0.0088
14	0.0036	0.0038	0.0089	0.0040	0.0090	0.0415	0.0052	0.0654	0.0079	0.0078
15	0.0297	0.0298	0.1049	0.0351	0.0814	0.1929	0.0543	0.2383	0.0479	0.0352
16	0.2826	0.2972	0.1506	0.2942	0.1577	0.2531	0.2437	0.1678	0.2295	0.2596
17	0.0547	0.0289	0.0364	0.0372	0.0597	0.0614	0.0590	0.0456	0.0560	0.0767
18	0.0086	0.0118	0.0062	0.0073	0.0186	0.0107	0.0102	0.0100	0.0116	0.0248
19	0.0116	0.0093	0.0342	0.0122	0.0269	0.0117	0.0126	0.0134	0.0147	0.0145

MATRIX : MRIO INVERSE

COLUMN / ROW	11	12	13	14	15	16	17	18	19
1	0.0095	0.0034	0.0017	0.0024	0.0035	0.0030	0.0023	0.0011	0.0008
2	0.0079	0.0034	0.0014	0.0020	0.0030	0.0024	0.0021	0.0011	0.0009
3	0.0054	0.0113	0.0304	0.0041	0.0050	0.0016	0.0013	0.0015	0.0515
4	0.0104	0.0120	0.0106	0.0101	0.0061	0.0059	0.0237	0.1853	0.0168
5	0.0190	0.0810	0.0734	0.1093	0.0160	0.0015	0.0024	0.0014	0.0014
6	0.0148	0.0154	0.0185	0.0138	0.0112	0.0368	0.0402	0.0466	0.0428
7	0.0551	0.0193	0.0091	0.0135	0.0198	0.0120	0.0123	0.0058	0.0043
8	0.0022	0.0031	0.0030	0.0025	0.0031	0.0050	0.0224	0.0014	0.0018
9	0.0563	0.0631	0.0149	0.0186	0.0415	0.0247	0.0139	0.0097	0.0090
10	0.0154	0.0161	0.0161	0.0160	0.0105	0.0102	0.0499	0.0121	0.0156
11	1.3004	0.0728	0.0425	0.0540	0.0638	0.0159	0.0180	0.0115	0.0083
12	0.0113	1.1218	0.0054	0.0072	0.0154	0.0050	0.0049	0.0051	0.0042
13	0.0142	0.0226	1.2637	0.0156	0.1474	0.0055	0.0153	0.0047	0.0053
14	0.0134	0.0098	0.0426	1.5314	0.0821	0.0032	0.0053	0.0026	0.0034
15	0.0494	0.0445	0.0820	0.0600	1.2278	0.0260	0.0297	0.0161	0.0175
16	0.2076	0.1592	0.1462	0.1490	0.1750	1.2212	0.1823	0.1340	0.0923
17	0.0486	0.0774	0.0798	0.0556	0.0405	0.0193	1.1009	0.0288	0.0406
18	0.0202	0.0370	0.0257	0.0222	0.0105	0.0094	0.0079	1.4128	0.0499
19	0.0179	0.0229	0.0244	0.0308	0.0138	0.0148	0.0078	0.0064	1.0627

MATRIX : RAS INVERSE

COLUMN / ROW	1	2	3	4	5	6	7	8	9	10
1	1.2961	0.0948	0.0016	0.0017	0.0018	0.0039	0.2428	0.0060	0.0071	0.0023
2	0.4266	1.0631	0.0014	0.0016	0.0015	0.0072	0.1822	0.0048	0.0056	0.0020
3	0.0018	0.0013	1.1805	0.0013	0.0047	0.0036	0.0025	0.0055	0.0045	0.0021
4	0.0161	0.0233	0.0088	1.0318	0.0119	0.0157	0.0103	0.0070	0.0084	0.5032
5	0.0046	0.0080	0.0043	0.0023	1.0802	0.0245	0.0047	0.0170	0.0060	0.0070
6	0.0274	0.0271	0.0147	0.0423	0.0141	1.0136	0.0180	0.0126	0.0146	0.0448
7	0.2445	0.0302	0.0084	0.0079	0.0091	0.0187	1.4091	0.0331	0.0392	0.0114
8	0.0034	0.0030	0.0123	0.0025	0.0084	0.0039	0.0030	1.3693	0.0027	0.0032
9	0.0269	0.0221	0.0244	0.0135	0.0183	0.1132	0.0728	0.0323	1.4418	0.0284
10	0.0320	0.0468	0.0165	0.0115	0.0191	0.0304	0.0187	0.0114	0.0140	1.0940
11	0.0620	0.0913	0.0544	0.0226	0.0669	0.0620	0.0860	0.0678	0.0867	0.0574
12	0.0066	0.0059	0.0050	0.0086	0.0054	0.0898	0.0145	0.0182	0.0083	0.0091
13	0.0066	0.0065	0.0390	0.0104	0.0359	0.0661	0.0102	0.1594	0.0213	0.0099
14	0.0041	0.0042	0.0100	0.0044	0.0102	0.0442	0.0059	0.0715	0.0089	0.0086
15	0.0313	0.0314	0.1083	0.0366	0.0865	0.1976	0.0570	0.2513	0.0510	0.0378
16	0.2896	0.3039	0.1559	0.3005	0.1674	0.2607	0.2544	0.1798	0.2403	0.2737
17	0.0561	0.0305	0.0382	0.0386	0.0634	0.0639	0.0616	0.0494	0.0591	0.0809
18	0.0086	0.0115	0.0064	0.0072	0.0184	0.0107	0.0102	0.0103	0.0116	0.0242
19	0.0118	0.0096	0.0342	0.0125	0.0277	0.0122	0.0130	0.0143	0.0153	0.0151

MATRIX : RAS INVERSE

COLUMN / ROW	11	12	13	14	15	16	17	18	19
1	0.0111	0.0039	0.0019	0.0028	0.0041	0.0034	0.0026	0.0016	0.0011
2	0.0094	0.0039	0.0017	0.0024	0.0036	0.0028	0.0024	0.0016	0.0011
3	0.0058	0.0114	0.0300	0.0044	0.0054	0.0018	0.0014	0.0020	0.0590
4	0.0123	0.0139	0.0121	0.0117	0.0072	0.0069	0.0259	0.2428	0.0220
5	0.0214	0.0863	0.0782	0.1179	0.0184	0.0018	0.0027	0.0020	0.0018
6	0.0164	0.0164	0.0194	0.0150	0.0123	0.0382	0.0410	0.0593	0.0505
7	0.0616	0.0212	0.0101	0.0151	0.0221	0.0133	0.0134	0.0080	0.0055
8	0.0026	0.0035	0.0033	0.0029	0.0035	0.0055	0.0240	0.0019	0.0022
9	0.0677	0.0725	0.0177	0.0223	0.0489	0.0290	0.0163	0.0141	0.0120
10	0.0173	0.0174	0.0173	0.0174	0.0117	0.0112	0.0525	0.0161	0.0192
11	1.3296	0.0787	0.0462	0.0594	0.0704	0.0179	0.0198	0.0159	0.0106
12	0.0125	1.1268	0.0058	0.0078	0.0166	0.0054	0.0052	0.0067	0.0051
13	0.0164	0.0247	1.2770	0.0176	0.1594	0.0062	0.0167	0.0065	0.0066
14	0.0154	0.0110	0.0462	1.5660	0.0903	0.0037	0.0060	0.0036	0.0044
15	0.0553	0.0481	0.0870	0.0651	1.2429	0.0283	0.0319	0.0216	0.0213
16	0.2292	0.1703	0.1555	0.1610	0.1894	1.2359	0.1921	0.1772	0.1131
17	0.0541	0.0821	0.0842	0.0600	0.0446	0.0212	1.1061	0.0382	0.0497
18	0.0209	0.0362	0.0253	0.0223	0.0109	0.0096	0.0079	1.4789	0.0561
19	0.0194	0.0238	0.0252	0.0322	0.0149	0.0157	0.0082	0.0084	1.0736

Appendix 4

PERCENTAGE COMPARISONS OF THE INVERSES (19-Industry Level)

BEA/MRIO

UN/MRIO

OBE/MRIO

RAS/MRIO

BEA/UN

MATRIX : % DIFFERENCE IN MULTIPLIERS: BEA/MRIO

COLUMN	1	2	3	4	5	6	7	8	9	10
ROW										
1	0.	1.	39.	54.	46.	27.	2.	16.	28.	46.
2	0.	0.	43.	56.	52.	13.	3.	19.	29.	49.
3	6.	9.	0.	8.	11.	6.	7.	8.	5.	9.
4	8.	7.	13.	0.	28.	10.	19.	26.	24.	0.
5	8.	5.	11.	12.	0.	3.	12.	10.	16.	10.
6	2.	2.	4.	1.	9.	0.	6.	9.	7.	4.
7	1.	5.	13.	16.	19.	9.	0.	6.	7.	16.
8	13.	15.	8.	19.	11.	47.	24.	0.	34.	19.
9	13.	17.	9.	26.	24.	3.	5.	14.	0.	14.
10	2.	1.	3.	4.	7.	2.	6.	9.	8.	0.
11	3.	2.	3.	7.	5.	4.	4.	7.	5.	6.
12	4.	5.	6.	3.	62.	1.	3.	5.	9.	8.
13	16.	17.	3.	9.	5.	4.	15.	4.	14.	15.
14	17.	18.	10.	14.	12.	4.	18.	7.	25.	12.
15	6.	6.	2.	4.	4.	2.	5.	4.	10.	8.
16	2.	2.	3.	2.	6.	3.	4.	7.	4.	5.
17	2.	4.	3.	3.	5.	3.	3.	6.	4.	3.
18	5.	4.	6.	19.	7.	5.	6.	9.	6.	5.
19	3.	4.	1.	3.	4.	5.	5.	7.	5.	5.

MATRIX : % DIFFERENCE IN MULTIPLIERS: BEA/MRIO

COLUMN	11	12	13	14	15	16	17	18	19
ROW									
1	30.	25.	39.	30.	30.	98.	36.	109.	117.
2	29.	23.	42.	34.	30.	122.	35.	93.	95.
3	8.	2.	1.	16.	14.	16.	9.	40.	1.
4	169.	27.	12.	15.	29.	30.	3.	1.	9.
5	10.	1.	2.	1.	16.	42.	12.	53.	48.
6	18.	8.	5.	9.	11.	3.	4.	19.	15.
7	9.	10.	16.	13.	13.	34.	10.	60.	64.
8	56.	28.	84.	144.	286.	15.	2.	105.	65.
9	11.	6.	20.	19.	11.	46.	20.	77.	66.
10	26.	8.	5.	7.	12.	13.	1.	23.	13.
11	0.	7.	7.	7.	8.	31.	10.	42.	49.
12	12.	0.	16.	15.	7.	13.	7.	27.	24.
13	32.	12.	0.	55.	6.	41.	6.	58.	38.
14	25.	18.	10.	0.	8.	41.	11.	49.	39.
15	15.	11.	8.	16.	1.	17.	7.	46.	32.
16	10.	8.	7.	9.	8.	1.	6.	42.	43.
17	12.	3.	3.	6.	10.	16.	0.	20.	10.
18	11.	2.	4.	5.	12.	9.	7.	0.	4.
19	9.	4.	3.	4.	10.	6.	9.	60.	0.

MATRIX : % DIFFERENCE IN MULTIPLIERS: UN/MRIO

COLUMN	1	2	3	4	5	6	7	8	9	10
ROW										
1	2.	11.	5.	7.	-16.	7.	5.	10.	17.	-15.
2	9.	1.	7.	8.	-16.	4.	8.	12.	19.	-13.
3	3.	1.	0.	4.	6.	10.	8.	12.	23.	-4.
4	21.	19.	12.	-2.	5.	11.	18.	16.	24.	10.
5	16.	12.	10.	5.	1.	7.	14.	13.	25.	-7.
6	1.	-1.	3.	1.	5.	0.	2.	6.	-38.	9.
7	3.	3.	6.	5.	-20.	5.	1.	7.	21.	-21.
8	-3.	-13.	-2.	-4.	5.	-25.	-9.	2.	-38.	2.
9	-6.	-13.	10.	8.	-4.	9.	9.	10.	8.	3.
10	13.	10.	3.	-25.	5.	3.	11.	9.	12.	1.
11	11.	11.	4.	2.	-11.	6.	8.	7.	26.	-23.
12	-1.	3.	5.	3.	-35.	1.	4.	6.	12.	2.
13	5.	6.	5.	8.	11.	5.	10.	6.	20.	7.
14	9.	10.	11.	7.	9.	7.	12.	7.	17.	6.
15	1.	4.	3.	4.	8.	2.	5.	5.	13.	4.
16	5.	5.	3.	3.	4.	3.	5.	6.	5.	7.
17	6.	5.	4.	-2.	5.	4.	6.	8.	22.	8.
18	4.	7.	9.	-92.	9.	8.	8.	12.	20.	-1.
19	-1.	-3.	2.	2.	7.	6.	3.	8.	5.	3.

MATRIX : % DIFFERENCE IN MULTIPLIERS: UN/MRIO

COLUMN	11	12	13	14	15	16	17	18	19
ROW									
1	1.	2.	-4.	3.	2.	11.	9.	34.	27.
2	4.	5.	-2.	4.	5.	13.	10.	35.	27.
3	13.	9.	10.	3.	14.	-11.	8.	29.	19.
4	11.	13.	17.	19.	17.	-11.	14.	28.	34.
5	13.	8.	9.	13.	16.	15.	12.	24.	28.
6	8.	5.	8.	9.	3.	5.	4.	31.	20.
7	9.	4.	-6.	0.	5.	9.	5.	29.	23.
8	-45.	-10.	-35.	-76.	-184.	5.	5.	27.	18.
9	16.	11.	-2.	-3.	11.	16.	12.	39.	31.
10	11.	7.	8.	10.	10.	6.	5.	25.	21.
11	3.	5.	-3.	1.	9.	11.	5.	20.	23.
12	8.	1.	-9.	-4.	8.	8.	6.	32.	22.
13	4.	0.	1.	-61.	10.	13.	8.	28.	26.
14	11.	1.	-4.	4.	12.	15.	11.	35.	28.
15	7.	1.	-6.	-12.	2.	8.	6.	32.	23.
16	10.	5.	4.	5.	7.	1.	5.	31.	22.
17	12.	8.	8.	8.	10.	6.	0.	30.	21.
18	18.	16.	12.	17.	14.	-29.	6.	9.	27.
19	11.	7.	7.	11.	9.	5.	5.	31.	1.

MATRIX ' : % DIFFERENCE IN MULTIPLIERS: OBE/MRIO

COLUMN	1	2	3	4	5	6	7	8	9	10
ROW										
1	0.	2.	78.	120.	87.	54.	7.	31.	42.	94.
2	1.	0.	143.	203.	157.	45.	5.	52.	157.	167.
3	7.	10.	0.	9.	23.	7.	7.	8.	5.	10.
4	14.	12.	18.	0.	34.	15.	25.	32.	30.	5.
5	17.	12.	31.	22.	0.	7.	25.	13.	24.	25.
6	2.	2.	4.	1.	9.	0.	6.	9.	7.	4.
7	1.	10.	25.	31.	32.	17.	0.	10.	14.	29.
8	43.	49.	27.	62.	35.	167.	77.	1.	116.	56.
9	39.	50.	27.	78.	49.	9.	15.	31.	1.	38.
10	8.	7.	13.	14.	34.	10.	21.	30.	28.	0.
11	5.	3.	4.	11.	8.	8.	8.	12.	10.	15.
12	12.	16.	16.	7.	489.	2.	8.	12.	33.	26.
13	27.	30.	7.	15.	9.	8.	26.	8.	19.	24.
14	27.	28.	19.	22.	20.	7.	28.	12.	38.	20.
15	15.	15.	4.	11.	7.	4.	12.	16.	31.	17.
16	4.	3.	8.	3.	12.	5.	6.	10.	7.	8.
17	3.	5.	3.	3.	5.	3.	4.	7.	4.	3.
18	6.	5.	7.	45.	7.	7.	7.	11.	7.	11.
19	4.	5.	1.	3.	4.	5.	5.	8.	5.	6.

MATRIX ' : % DIFFERENCE IN MULTIPLIERS: OBE/MRIO

COLUMN	11	12	13	14	15	16	17	18	19
ROW									
1	42.	46.	74.	57.	51.	224.	71.	265.	271.
2	52.	69.	132.	98.	79.	449.	215.	365.	360.
3	9.	3.	1.	17.	14.	18.	10.	42.	1.
4	173.	34.	18.	21.	36.	41.	8.	8.	15.
5	43.	10.	2.	2.	19.	61.	20.	71.	84.
6	18.	8.	5.	9.	11.	3.	4.	19.	15.
7	26.	17.	26.	20.	22.	66.	17.	93.	103.
8	179.	92.	300.	515.	1023.	47.	6.	169.	116.
9	26.	16.	46.	39.	28.	145.	54.	177.	154.
10	237.	43.	15.	19.	34.	36.	3.	32.	20.
11	1.	16.	9.	10.	14.	47.	15.	56.	80.
12	44.	0.	61.	50.	21.	29.	14.	35.	34.
13	65.	17.	0.	132.	14.	55.	10.	138.	86.
14	44.	27.	19.	0.	16.	56.	17.	65.	67.
15	40.	34.	27.	53.	1.	45.	14.	65.	47.
16	14.	15.	13.	15.	11.	2.	22.	200.	215.
17	12.	4.	3.	6.	10.	21.	0.	22.	12.
18	17.	3.	6.	5.	13.	10.	8.	0.	4.
19	9.	5.	4.	4.	10.	7.	9.	83.	0.

MATRIX .: % DIFFERENCE IN MULTIPLIERS: RAS/MRIO

COLUMN	1	2	3	4	5	6	7	8	9	10
ROW										
1	1.	5.	15.	13.	18.	13.	5.	13.	12.	17.
2	4.	0.	17.	14.	20.	9.	7.	16.	14.	18.
3	6.	9.	-1.	10.	6.	5.	5.	6.	3.	9.
4	9.	7.	10.	0.	14.	8.	13.	17.	14.	4.
5	11.	7.	13.	11.	0.	7.	13.	14.	12.	10.
6	1.	1.	3.	-0.	7.	0.	5.	8.	6.	2.
7	1.	7.	11.	9.	13.	9.	1.	9.	7.	12.
8	8.	8.	4.	9.	8.	9.	11.	1.	12.	12.
9	15.	16.	15.	16.	19.	11.	13.	18.	3.	16.
10	4.	3.	4.	5.	7.	3.	8.	10.	7.	0.
11	7.	5.	6.	7.	8.	7.	6.	9.	7.	8.
12	4.	4.	6.	3.	8.	1.	4.	6.	6.	6.
13	11.	11.	6.	7.	9.	5.	12.	7.	8.	12.
14	13.	12.	12.	10.	14.	7.	14.	9.	12.	11.
15	6.	5.	3.	4.	6.	2.	5.	5.	6.	7.
16	2.	2.	4.	2.	6.	3.	4.	7.	5.	5.
17	2.	5.	5.	4.	6.	4.	4.	8.	6.	5.
18	-0.	-2.	3.	-1.	-1.	-0.	-0.	3.	-0.	-2.
19	2.	4.	0.	2.	3.	5.	4.	7.	4.	5.

MATRIX H: % DIFFERENCE IN MULTIPLIERS: RAS/MRIO

COLUMN / ROW	11	12	13	14	15	16	17	18	19
1	17.	15.	17.	17.	16.	14.	14.	44.	34.
2	19.	15.	18.	19.	18.	16.	15.	44.	33.
3	7.	1.	-1.	8.	7.	11.	8.	30.	14.
4	19.	16.	15.	16.	18.	15.	9.	31.	31.
5	13.	7.	7.	8.	15.	16.	13.	39.	29.
6	11.	7.	5.	8.	10.	4.	2.	27.	18.
7	12.	10.	12.	12.	11.	11.	9.	38.	28.
8	18.	12.	12.	15.	13.	10.	7.	40.	27.
9	20.	15.	19.	20.	18.	18.	17.	46.	34.
10	12.	8.	7.	9.	11.	9.	5.	33.	23.
11	2.	8.	9.	10.	10.	12.	10.	38.	27.
12	11.	0.	8.	9.	8.	7.	5.	30.	20.
13	16.	9.	1.	13.	8.	14.	9.	38.	26.
14	15.	12.	8.	2.	10.	15.	12.	39.	27.
15	12.	8.	6.	9.	1.	9.	7.	34.	22.
16	10.	7.	6.	8.	8.	1.	5.	32.	23.
17	11.	6.	6.	8.	10.	10.	0.	33.	22.
18	3.	-2.	-2.	0.	4.	2.	0.	5.	13.
19	9.	4.	3.	4.	8.	6.	6.	32.	1.

MATRIX : % DIFFERENCE IN MULTIPLIERS: BEA/UN

COLUMN	1	2	3	4	5	6	7	8	9	10
ROW										
1	-2.	-9.	32.	44.	74.	19.	-4.	6.	9.	73.
2	-8.	-1.	34.	45.	80.	9.	-4.	7.	9.	72.
3	4.	8.	-0.	4.	5.	-4.	-1.	-4.	-15.	14.
4	-11.	-10.	1.	2.	23.	-1.	1.	8.	-0.	-9.
5	-7.	-7.	1.	7.	-0.	-3.	-1.	-3.	-7.	18.
6	2.	3.	1.	0.	3.	0.	4.	2.	72.	-5.
7	-2.	2.	7.	11.	48.	3.	-1.	-1.	-12.	46.
8	23.	32.	9.	23.	6.	96.	36.	-2.	118.	17.
9	21.	34.	-1.	16.	29.	-5.	-4.	4.	-7.	11.
10	-10.	-8.	-0.	40.	1.	-0.	-4.	1.	-3.	-1.
11	-7.	-8.	-2.	5.	19.	-1.	-3.	0.	-17.	38.
12	5.	2.	1.	-0.	148.	-1.	-1.	-1.	-2.	5.
13	10.	11.	-2.	1.	-5.	-1.	5.	-2.	-5.	8.
14	8.	7.	-0.	6.	3.	-2.	5.	0.	7.	6.
15	5.	2.	-1.	0.	-4.	-0.	0.	-1.	-3.	4.
16	-3.	-3.	1.	-1.	3.	0.	-1.	1.	-1.	-2.
17	-3.	-1.	-1.	5.	-0.	-1.	-2.	-2.	-15.	-4.
18	0.	-3.	-2.	1314.	-2.	-2.	-2.	-2.	-11.	7.
19	4.	7.	-1.	0.	-3.	-1.	1.	-0.	-0.	2.

MATRIX ': % DIFFERENCE IN MULTIPLIERS: BEA/UN

COLUMN	11	12	13	14	15	16	17	18	19
ROW									
1	28.	22.	44.	27.	27.	78.	25.	56.	71.
2	24.	17.	45.	28.	25.	96.	23.	43.	54.
3	-4.	-6.	-8.	12.	-1.	30.	1.	9.	-15.
4	143.	12.	-4.	-3.	10.	47.	-9.	-21.	-19.
5	-2.	-6.	-7.	-10.	0.	23.	0.	24.	16.
6	10.	3.	-3.	-0.	8.	-2.	-1.	-9.	-5.
7	1.	6.	24.	13.	8.	23.	4.	24.	33.
8	184.	42.	185.	897.	-558.	9.	-3.	62.	39.
9	-4.	-4.	23.	23.	-0.	26.	6.	28.	27.
10	14.	1.	-3.	-3.	2.	7.	-3.	-2.	-7.
11	-2.	2.	10.	6.	-0.	18.	5.	18.	21.
12	3.	-1.	28.	20.	-1.	5.	1.	-4.	1.
13	27.	12.	-1.	300.	-4.	25.	-2.	23.	10.
14	13.	17.	15.	-4.	-4.	23.	0.	10.	8.
15	7.	10.	14.	31.	-1.	8.	1.	11.	7.
16	0.	3.	3.	3.	1.	-0.	1.	8.	-17.
17	0.	-4.	-5.	-2.	-0.	10.	-0.	-8.	-9.
18	-6.	-12.	-7.	-11.	-1.	54.	1.	-8.	-19.
19	-2.	-3.	-4.	-7.	0.	1.	3.	22.	-1.

Appendix 5

1963 INPUT-OUTPUT DATA AND CALCULATED FLOW MATRICES
(78-Industry Level)

Use Matrix

Make Matrix

Final Demand Vector

BEA Pure Flow

UN Pure Flow

RAS Flow Matrix

MATRIX U: 1963 80-INDUSTRY LEVEL USE MATRIX

COLUMN	1	2	3	4	5	6	7	8	9	10
ROW										
1	4750.	1820.	0.	192.	0.	0.	0.	0.	0.	0.
2	7898.	769.	0.	0.	0.	0.	0.	1.	0.	0.
3	0.	0.	35.	0.	0.	0.	0.	0.	0.	0.
4	445.	1053.	74.	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	55.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	4.	263.	0.	0.	0.	0.
7	6.	1.	0.	0.	5.	1.	410.	0.	2.	1.
8	0.	0.	0.	0.	0.	0.	0.	297.	0.	0.
9	1.	85.	0.	0.	5.	0.	0.	0.	17.	5.
10	0.	35.	0.	0.	0.	0.	0.	0.	0.	31.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	200.	367.	0.	0.	1.	7.	14.	379.	11.	3.
13	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14	3559.	11.	49.	39.	1.	2.	3.	18.	3.	1.
15	0.	1.	0.	0.	0.	0.	0.	1.	0.	0.
16	0.	9.	0.	0.	0.	0.	0.	0.	0.	0.
17	9.	29.	62.	41.	0.	0.	0.	2.	0.	0.
18	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
19	17.	43.	1.	0.	0.	0.	0.	0.	0.	0.
20	2.	2.	0.	0.	2.	10.	17.	0.	0.	0.
21	0.	97.	0.	14.	0.	0.	0.	0.	0.	0.
22	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
23	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
24	12.	1.	0.	0.	0.	0.	1.	3.	6.	2.
25	2.	3.	0.	86.	0.	0.	0.	0.	0.	0.
26	5.	9.	1.	0.	0.	0.	1.	3.	1.	0.
27	57.	1424.	2.	1.	21.	56.	38.	101.	34.	17.
28	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
29	83.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30	0.	0.	4.	0.	0.	0.	0.	5.	0.	0.
31	170.	954.	34.	3.	11.	7.	23.	64.	37.	6.
32	29.	114.	1.	0.	7.	10.	33.	16.	70.	2.
33	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
34	7.	0.	0.	3.	0.	0.	0.	0.	0.	0.
35	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.
36	1.	39.	0.	0.	4.	2.	3.	41.	4.	0.
37	0.	0.	0.	0.	21.	27.	39.	30.	28.	14.
38	1.	1.	0.	0.	1.	0.	0.	0.	2.	2.
39	8.	13.	21.	0.	0.	0.	0.	0.	0.	0.
40	0.	0.	0.	0.	0.	2.	0.	18.	2.	1.
41	25.	0.	0.	0.	0.	0.	0.	0.	0.	0.
42	21.	31.	15.	132.	1.	4.	12.	13.	4.	1.
43	0.	0.	0.	0.	8.	11.	36.	16.	37.	5.
44	5.	229.	0.	0.	0.	0.	0.	0.	0.	0.
45	0.	0.	0.	0.	24.	30.	85.	25.	48.	16.
46	0.	0.	0.	0.	0.	3.	1.	0.	16.	4.
47	0.	0.	0.	0.	1.	1.	5.	0.	0.	0.
48	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
49	0.	0.	0.	0.	0.	1.	2.	25.	23.	2.
50	3.	7.	0.	0.	0.	32.	11.	0.	8.	2.
51	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
52	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

MATRIX U: 1963 80-INDUSTRY LEVEL USE MATRIX

COLUMN	1	2	3	4	5	6	7	8	9	10
ROW										
53	0.	0.	0.	0.	0.	1.	7.	82.	7.	5.
54	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
55	1.	1.	36.	0.	0.	1.	11.	0.	1.	1.
56	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.
57	0.	0.	0.	0.	0.	0.	0.	15.	0.	0.
58	6.	25.	2.	0.	0.	0.	1.	1.	1.	0.
59	7.	14.	0.	0.	2.	2.	8.	3.	15.	1.
60	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
61	0.	4.	21.	0.	0.	2.	9.	0.	0.	0.
62	0.	0.	1.	0.	0.	1.	0.	5.	0.	0.
63	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
64	2.	2.	0.	0.	0.	1.	0.	1.	0.	0.
65	613.	321.	51.	32.	127.	32.	51.	308.	38.	40.
66	52.	83.	0.	0.	1.	2.	4.	9.	1.	3.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	96.	204.	0.	1.	27.	41.	65.	116.	62.	36.
69	871.	844.	57.	43.	22.	28.	59.	149.	55.	14.
70	156.	315.	3.	6.	7.	25.	28.	94.	29.	6.
71	289.	2020.	0.	41.	111.	42.	73.	2246.	45.	11.
72	2.	4.	2.	2.	0.	1.	1.	9.	1.	0.
73	139.	836.	1.	0.	33.	14.	28.	108.	22.	6.
74	76.	161.	7.	1.	1.	2.	8.	42.	19.	1.
75	0.	1.	0.	0.	0.	0.	0.	1.	0.	0.
76	181.	13.	0.	0.	1.	1.	2.	5.	0.	2.
77	4.	4.	0.	0.	1.	1.	2.	5.	1.	2.
78	0.	1.	0.	0.	1.	1.	1.	3.	2.	1.
79	6869.	15360.	1032.	582.	954.	847.	1544.	7975.	1236.	450.
80	26684.	27361.	1517.	1222.	1463.	1514.	2636.	12240.	1888.	692.

MATRIX U: 1963 80-INDUSTRY LEVEL USE MATRIX

COLUMN / ROW	11	12	13	14	15	16	17	18	19	20
1	2.	1.	0.	15393.	0.	47.	181.	0.	0.	0.
2	328.	2.	1.	5990.	1125.	1329.	29.	1.	0.	1.
3	0.	0.	0.	304.	0.	0.	0.	115.	0.	916.
4	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	1.	39.	2.	13.	1.	2.	0.	2.
8	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9	478.	259.	0.	7.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	5.	0.	0.	0.	0.	0.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	17.	7.	6.	148.	7.	29.	9.	15.	4.	36.
13	5.	0.	161.	0.	0.	0.	0.	0.	0.	0.
14	122.	44.	13.	12956.	11.	43.	24.	25.	4.	10.
15	8.	3.	1.	5.	1764.	1.	0.	2.	0.	1.
16	31.	0.	0.	4.	0.	4287.	536.	4879.	697.	0.
17	124.	3.	0.	3.	0.	413.	250.	58.	290.	0.
18	29.	13.	4.	46.	0.	0.	27.	3199.	14.	14.
19	7.	0.	0.	95.	0.	0.	72.	270.	272.	0.
20	3554.	724.	16.	9.	1.	0.	0.	0.	8.	3172.
21	0.	0.	5.	87.	5.	0.	0.	0.	0.	1.
22	342.	0.	0.	0.	0.	0.	0.	0.	0.	0.
23	184.	4.	0.	0.	0.	0.	0.	0.	0.	0.
24	212.	73.	5.	912.	35.	55.	43.	14.	2.	12.
25	4.	0.	7.	1138.	91.	69.	29.	127.	28.	17.
26	12.	5.	7.	477.	58.	6.	1.	12.	2.	4.
27	201.	54.	16.	198.	2.	345.	15.	14.	1.	94.
28	1.	0.	1.	102.	78.	1090.	530.	348.	28.	16.
29	5.	1.	1.	159.	6.	35.	8.	11.	0.	1.
30	308.	859.	0.	0.	0.	7.	0.	0.	0.	51.
31	1119.	540.	13.	210.	2.	22.	8.	17.	2.	46.
32	487.	139.	99.	255.	0.	29.	46.	25.	97.	9.
33	0.	0.	0.	2.	0.	1.	0.	40.	0.	2.
34	2.	1.	0.	1.	0.	0.	0.	0.	0.	0.
35	81.	93.	0.	776.	0.	42.	0.	0.	0.	14.
36	5813.	410.	0.	1.	0.	0.	0.	0.	0.	48.
37	2125.	317.	140.	2.	0.	0.	0.	0.	3.	46.
38	1244.	209.	179.	1.	0.	0.	0.	0.	3.	7.
39	0.	0.	0.	1593.	9.	0.	0.	0.	0.	0.
40	6159.	569.	0.	0.	0.	0.	0.	0.	0.	0.
41	112.	19.	5.	201.	0.	0.	0.	0.	0.	7.
42	975.	269.	34.	216.	42.	4.	1.	18.	3.	165.
43	26.	0.	0.	0.	0.	0.	0.	0.	0.	0.
44	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.
45	238.	71.	0.	0.	0.	0.	0.	0.	0.	0.
46	257.	96.	1.	7.	0.	3.	0.	2.	0.	4.
47	11.	0.	15.	0.	0.	0.	0.	0.	0.	0.
48	0.	0.	0.	34.	0.	75.	11.	7.	0.	32.
49	210.	43.	12.	4.	0.	1.	0.	1.	0.	1.
50	12.	1.	13.	4.	0.	0.	0.	0.	0.	1.
51	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
52	404.	116.	0.	0.	0.	0.	0.	0.	0.	0.

MATRIX U: 1963 80-INDUSTRY LEVEL USE MATRIX

ROW \ COLUMN	11	12	13	14	15	16	17	18	19	20
53	337.	56.	24.	0.	0.	0.	0.	0.	0.	0.
54	185.	100.	0.	1.	0.	0.	0.	0.	0.	0.
55	1123.	183.	0.	1.	0.	0.	0.	0.	0.	0.
56	81.	21.	234.	2.	0.	0.	0.	1.	0.	0.
57	1.	1.	83.	0.	0.	0.	0.	0.	0.	0.
58	37.	10.	18.	7.	0.	0.	0.	0.	0.	1.
59	36.	14.	1.	15.	0.	0.	0.	1.	0.	3.
60	0.	0.	591.	0.	0.	0.	0.	0.	0.	0.
61	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.
62	208.	70.	28.	8.	1.	3.	1.	8.	1.	3.
63	6.	1.	18.	6.	1.	2.	0.	4.	0.	1.
64	94.	79.	2.	13.	1.	3.	40.	349.	4.	2.
65	2290.	553.	48.	2565.	47.	231.	83.	147.	28.	361.
66	180.	79.	52.	191.	3.	26.	9.	77.	11.	29.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	205.	90.	26.	495.	8.	131.	23.	64.	12.	83.
69	5474.	1711.	96.	2611.	67.	450.	207.	647.	142.	270.
70	401.	161.	27.	382.	15.	49.	14.	89.	17.	82.
71	307.	134.	30.	369.	13.	62.	22.	215.	26.	81.
72	46.	20.	16.	209.	16.	9.	4.	15.	5.	5.
73	2959.	281.	110.	2200.	312.	122.	37.	236.	28.	138.
74	235.	101.	9.	182.	1.	5.	2.	12.	2.	29.
75	7.	3.	1.	5.	1.	1.	0.	2.	0.	1.
76	59.	26.	8.	36.	1.	3.	1.	10.	1.	4.
77	18.	8.	10.	51.	13.	10.	4.	46.	5.	6.
78	28.	10.	0.	26.	0.	2.	0.	1.	0.	2.
79	25940.	11137.	2584.	22365.	3680.	3799.	1183.	6825.	748.	4537.
80	65519.	19794.	4774.	73125.	7420.	12855.	3453.	17953.	2489.	10368.

MATRIX U: 1963 80-INDUSTRY LEVEL USE MATRIX

COLUMN	21	22	23	24	25	26	27	28	29	30
ROW										
1	0.	0.	0.	0.	0.	1.	1.	0.	3.	0.
2	0.	0.	0.	1.	0.	4.	19.	1.	10.	1.
3	0.	0.	0.	0.	0.	0.	28.	0.	1.	0.
4	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	83.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	80.	0.	0.	0.
7	0.	1.	1.	76.	1.	1.	68.	24.	4.	0.
8	0.	0.	0.	0.	0.	0.	29.	0.	0.	0.
9	0.	0.	0.	56.	0.	0.	33.	0.	3.	5.
10	0.	0.	0.	12.	0.	0.	279.	0.	2.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	1.	5.	3.	45.	12.	26.	81.	24.	25.	6.
13	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14	1.	8.	3.	139.	5.	88.	179.	26.	272.	112.
15	0.	1.	0.	1.	0.	6.	3.	1.	2.	1.
16	0.	214.	2.	70.	0.	4.	2.	1.	1.	0.
17	0.	105.	31.	18.	0.	23.	0.	0.	0.	0.
18	1.	7.	3.	9.	5.	0.	7.	3.	3.	1.
19	0.	1.	0.	0.	0.	0.	15.	0.	0.	0.
20	127.	554.	143.	786.	3.	27.	41.	3.	0.	0.
21	13.	1.	1.	0.	0.	0.	4.	2.	2.	1.
22	0.	72.	4.	0.	0.	0.	0.	0.	0.	0.
23	0.	0.	42.	0.	0.	0.	0.	0.	0.	0.
24	0.	4.	2.	2261.	1869.	2552.	156.	209.	76.	1.
25	1.	52.	30.	341.	136.	64.	90.	41.	214.	19.
26	0.	3.	2.	35.	9.	1833.	9.	3.	37.	2.
27	0.	7.	1.	443.	81.	366.	2984.	1778.	689.	457.
28	0.	7.	0.	170.	34.	34.	46.	100.	0.	212.
29	0.	1.	0.	13.	1.	4.	12.	18.	517.	10.
30	0.	91.	36.	0.	0.	24.	17.	0.	6.	1.
31	1.	6.	4.	105.	35.	43.	118.	22.	38.	102.
32	0.	236.	88.	147.	5.	71.	4.	5.	271.	1.
33	0.	4.	2.	2.	0.	0.	3.	1.	0.	0.
34	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
35	0.	27.	40.	0.	0.	0.	10.	0.	163.	0.
36	0.	0.	14.	14.	0.	0.	29.	0.	10.	5.
37	34.	92.	178.	1.	0.	2.	105.	0.	0.	6.
38	0.	32.	18.	0.	13.	6.	155.	2.	0.	22.
39	0.	0.	0.	0.	0.	0.	156.	14.	180.	148.
40	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
41	1.	7.	20.	0.	0.	0.	1.	0.	32.	0.
42	2.	259.	68.	153.	15.	18.	94.	2.	58.	1.
43	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
44	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
45	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
46	0.	1.	0.	5.	1.	2.	7.	1.	1.	0.
47	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
48	2.	0.	0.	29.	8.	33.	148.	0.	0.	0.
49	0.	0.	1.	25.	0.	0.	8.	1.	0.	0.
50	0.	0.	3.	0.	0.	1.	0.	0.	1.	0.
51	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
52	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

MATRIX U: 1963 80-INDUSTRY LEVEL USE MATRIX

COLUMN / ROW	21	22	23	24	25	26	27	28	29	30
53	0.	0.	0.	0.	0.	0.	15.	0.	0.	0.
54	0.	0.	0.	0.	0.	1.	1.	0.	1.	0.
55	0.	0.	2.	0.	0.	0.	0.	0.	3.	0.
56	0.	0.	0.	0.	0.	2.	1.	0.	1.	0.
57	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
58	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
59	0.	0.	0.	1.	0.	2.	1.	0.	1.	0.
60	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
61	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
62	0.	2.	1.	2.	1.	4.	2.	1.	5.	0.
63	0.	1.	0.	1.	1.	134.	2.	1.	1.	0.
64	0.	3.	1.	3.	1.	29.	4.	1.	2.	1.
65	22.	102.	40.	515.	154.	296.	506.	138.	185.	69.
66	1.	19.	12.	38.	21.	190.	63.	23.	40.	13.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	4.	23.	13.	274.	29.	85.	555.	71.	36.	11.
69	12.	175.	71.	428.	101.	384.	500.	179.	311.	123.
70	2.	35.	23.	73.	16.	119.	96.	34.	57.	16.
71	4.	86.	29.	79.	47.	882.	100.	43.	86.	21.
72	1.	6.	2.	25.	11.	65.	26.	8.	48.	14.
73	4.	83.	33.	203.	82.	503.	361.	163.	1287.	67.
74	1.	5.	3.	9.	5.	34.	15.	4.	6.	2.
75	0.	1.	0.	1.	0.	6.	3.	1.	2.	1.
76	0.	3.	2.	5.	3.	30.	8.	3.	6.	2.
77	0.	5.	3.	11.	4.	180.	13.	3.	18.	4.
78	0.	0.	0.	5.	0.	5.	8.	2.	1.	0.
79	149.	1615.	812.	6128.	1862.	7830.	7336.	2616.	3788.	908.
80	384.	3965.	1788.	12763.	4573.	16018.	14718.	5573.	8508.	2370.

MATRIX U: 1963 80-INDUSTRY LEVEL USE MATRIX

COLUMN	31	32	33	34	35	36	37	38	39	40
ROW										
1	0.	0.	57.	0.	0.	0.	0.	0.	0.	0.
2	0.	1.	0.	0.	0.	8.	1.	1.	0.	1.
3	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
4	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	17.	1168.	15.	0.	0.
6	0.	0.	0.	0.	0.	0.	1.	890.	0.	0.
7	9.	9.	2.	0.	3.	82.	469.	13.	0.	1.
8	9411.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9	67.	10.	0.	0.	37.	742.	70.	18.	0.	1.
10	1.	0.	0.	0.	1.	10.	12.	0.	0.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	349.	27.	1.	4.	13.	43.	173.	44.	3.	15.
13	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14	34.	21.	241.	7.	5.	22.	23.	18.	3.	22.
15	1.	2.	0.	0.	0.	1.	2.	1.	0.	2.
16	0.	180.	0.	99.	0.	13.	0.	12.	0.	0.
17	0.	346.	0.	107.	0.	16.	0.	13.	0.	2.
18	3.	10.	0.	18.	4.	10.	20.	7.	2.	9.
19	0.	0.	0.	30.	0.	20.	0.	0.	0.	0.
20	4.	26.	1.	39.	54.	28.	32.	22.	2.	15.
21	0.	3.	0.	3.	11.	2.	3.	2.	0.	9.
22	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
23	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
24	104.	16.	0.	16.	2.	147.	11.	22.	1.	15.
25	60.	152.	3.	55.	134.	41.	16.	12.	43.	42.
26	6.	6.	0.	3.	2.	6.	11.	4.	89.	6.
27	539.	352.	32.	0.	130.	152.	412.	146.	8.	37.
28	0.	1587.	0.	8.	0.	71.	0.	128.	3.	0.
29	54.	1.	39.	7.	0.	25.	2.	1.	2.	6.
30	0.	10.	0.	0.	5.	0.	0.	1.	69.	90.
31	1622.	20.	3.	3.	8.	78.	157.	82.	4.	25.
32	1.	445.	1.	303.	62.	55.	15.	16.	7.	4.
33	2.	1.	179.	603.	0.	3.	5.	2.	0.	1.
34	0.	0.	0.	101.	0.	0.	0.	0.	0.	0.
35	0.	23.	0.	1.	190.	0.	0.	1.	0.	72.
36	33.	7.	1.	0.	69.	1065.	33.	35.	0.	14.
37	1.	50.	0.	6.	7.	110.	4897.	34.	993.	1975.
38	46.	16.	0.	1.	15.	21.	461.	4883.	35.	620.
39	134.	2.	0.	0.	0.	0.	1.	0.	1.	0.
40	0.	0.	0.	0.	1.	10.	0.	0.	0.	183.
41	0.	11.	0.	0.	1.	1.	137.	29.	18.	119.
42	7.	51.	1.	30.	1.	99.	363.	53.	4.	297.
43	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
44	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
45	0.	0.	0.	0.	0.	46.	0.	0.	0.	0.
46	4.	2.	0.	1.	1.	13.	12.	4.	0.	2.
47	0.	5.	0.	0.	3.	10.	11.	68.	3.	32.
48	0.	6.	0.	0.	0.	0.	21.	5.	0.	0.
49	2.	1.	0.	0.	0.	8.	119.	38.	0.	43.
50	0.	6.	0.	0.	0.	1.	163.	96.	0.	0.
51	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
52	0.	0.	0.	0.	0.	0.	15.	0.	0.	59.

MATRIX U: 1963 80-INDUSTRY LEVEL USE MATRIX

COLUMN	31	32	33	34	35	36	37	38	39	40
ROW										
53	0.	0.	0.	0.	0.	0.	138.	23.	0.	100.
54	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
55	0.	0.	0.	0.	0.	14.	0.	3.	0.	0.
56	0.	1.	0.	0.	0.	0.	1.	0.	0.	1.
57	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
58	0.	0.	0.	0.	0.	1.	1.	0.	0.	0.
59	1.	3.	0.	0.	0.	2.	1.	1.	0.	1.
60	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
61	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
62	1.	2.	0.	2.	1.	2.	22.	3.	0.	52.
63	1.	2.	0.	1.	1.	1.	3.	1.	0.	3.
64	2.	13.	0.	56.	5.	16.	33.	9.	0.	3.
65	980.	203.	15.	43.	73.	557.	1181.	349.	62.	176.
66	26.	33.	2.	15.	10.	47.	103.	45.	4.	55.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	382.	106.	9.	13.	113.	308.	613.	325.	17.	63.
69	400.	303.	35.	113.	109.	248.	742.	428.	74.	285.
70	214.	49.	6.	22.	21.	77.	214.	72.	18.	54.
71	418.	76.	10.	28.	24.	61.	55.	56.	17.	110.
72	14.	21.	0.	4.	5.	13.	22.	9.	3.	37.
73	487.	231.	8.	86.	66.	197.	328.	144.	47.	146.
74	8.	8.	0.	3.	3.	28.	19.	7.	1.	10.
75	1.	2.	0.	0.	0.	1.	2.	1.	0.	2.
76	3.	6.	0.	2.	1.	7.	9.	4.	1.	7.
77	14.	10.	1.	12.	4.	9.	16.	7.	1.	9.
78	2.	2.	0.	0.	1.	2.	8.	3.	0.	1.
79	5844.	4741.	304.	1560.	1679.	4724.	11703.	5596.	835.	3366.
80	21294.	9221.	956.	3407.	2877.	9299.	24051.	13806.	2369.	8198.

MATRIX U: 1963 80-INDUSTRY LEVEL USE MATRIX

COLUMN	41	42	43	44	45	46	47	48	49	50
ROW										
1	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
2	0.	1.	0.	0.	0.	0.	1.	0.	1.	0.
3	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
4	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7	1.	2.	2.	2.	2.	0.	1.	1.	1.	0.
8	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	6.	13.	4.	3.	6.	2.	11.	5.	9.	7.
13	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14	8.	21.	4.	6.	8.	3.	14.	9.	12.	7.
15	1.	2.	0.	0.	1.	0.	1.	1.	1.	1.
16	0.	0.	0.	0.	0.	2.	0.	2.	0.	2.
17	0.	44.	0.	0.	0.	0.	0.	1.	0.	0.
18	6.	9.	2.	3.	3.	1.	6.	4.	5.	3.
19	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20	36.	45.	2.	7.	3.	1.	5.	14.	9.	2.
21	3.	5.	1.	2.	1.	0.	1.	1.	2.	1.
22	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
23	0.	0.	0.	2.	0.	0.	0.	0.	0.	0.
24	18.	16.	1.	2.	2.	1.	4.	3.	7.	2.
25	52.	88.	8.	9.	6.	2.	11.	4.	14.	9.
26	3.	6.	2.	2.	3.	1.	4.	3.	5.	2.
27	30.	123.	4.	8.	7.	3.	14.	11.	16.	5.
28	24.	0.	0.	0.	0.	0.	0.	4.	0.	0.
29	3.	5.	1.	1.	1.	0.	2.	2.	1.	1.
30	27.	66.	1.	16.	12.	5.	3.	2.	3.	0.
31	18.	20.	10.	7.	10.	5.	20.	24.	29.	5.
32	56.	105.	5.	57.	80.	45.	18.	36.	20.	7.
33	0.	0.	0.	14.	0.	0.	0.	4.	3.	0.
34	0.	10.	0.	0.	0.	0.	0.	0.	0.	0.
35	1.	9.	0.	0.	0.	0.	0.	0.	0.	0.
36	17.	70.	18.	9.	12.	2.	50.	8.	38.	21.
37	955.	1036.	226.	413.	626.	169.	402.	309.	562.	187.
38	269.	555.	92.	21.	40.	24.	92.	78.	174.	86.
39	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
40	0.	0.	4.	0.	38.	8.	20.	63.	37.	0.
41	100.	86.	57.	86.	47.	21.	50.	30.	32.	15.
42	50.	338.	25.	35.	75.	17.	26.	55.	98.	44.
43	0.	0.	195.	138.	116.	12.	0.	24.	14.	0.
44	0.	0.	0.	147.	0.	0.	0.	0.	0.	0.
45	0.	0.	0.	0.	164.	0.	0.	0.	0.	0.
46	1.	2.	8.	0.	1.	108.	4.	1.	1.	1.
47	35.	77.	61.	41.	121.	22.	381.	68.	89.	73.
48	4.	0.	0.	0.	0.	0.	1.	224.	0.	0.
49	2.	9.	70.	258.	227.	77.	175.	164.	399.	4.
50	0.	0.	63.	83.	16.	29.	0.	9.	0.	224.
51	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
52	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

MATRIX U: 1963 80-INDUSTRY LEVEL USE MATRIX

COLUMN	41	42	43	44	45	46	47	48	49	50
ROW										
53	2.	31.	25.	7.	49.	58.	126.	102.	107.	4.
54	0.	0.	0.	4.	0.	0.	0.	0.	0.	0.
55	1.	1.	0.	11.	0.	0.	0.	0.	2.	0.
56	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.
57	0.	3.	0.	0.	0.	0.	0.	0.	7.	0.
58	0.	0.	38.	29.	4.	4.	0.	0.	1.	12.
59	0.	1.	5.	23.	8.	0.	0.	0.	0.	0.
60	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.
61	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.
62	1.	2.	7.	4.	1.	0.	1.	6.	32.	1.
63	1.	1.	0.	1.	1.	0.	1.	1.	1.	0.
64	1.	16.	1.	1.	1.	1.	2.	1.	2.	1.
65	83.	138.	32.	63.	62.	26.	59.	50.	68.	33.
66	25.	35.	10.	11.	16.	8.	25.	18.	28.	10.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	44.	82.	13.	18.	27.	7.	39.	21.	40.	19.
69	114.	255.	75.	119.	133.	56.	146.	130.	156.	57.
70	35.	59.	8.	24.	39.	10.	34.	26.	26.	19.
71	52.	85.	3.	13.	23.	15.	42.	93.	35.	29.
72	7.	15.	4.	6.	7.	3.	12.	7.	10.	5.
73	79.	163.	38.	79.	56.	26.	87.	55.	90.	41.
74	3.	8.	3.	3.	4.	2.	5.	4.	6.	2.
75	1.	2.	0.	0.	1.	0.	1.	1.	1.	1.
76	3.	6.	2.	2.	3.	1.	4.	3.	5.	2.
77	5.	9.	3.	4.	5.	2.	7.	5.	7.	3.
78	1.	1.	1.	0.	1.	0.	0.	0.	1.	0.
79	2237.	3894.	952.	1144.	1620.	608.	2593.	1649.	2428.	1125.
80	4425.	7572.	2087.	2940.	3687.	1391.	4502.	3338.	4634.	2072.

MATRIX U: 1963 80-INDUSTRY LEVEL USE MATRIX

COLUMN	51	52	53	54	55	56	57	58	59	60
ROW										
1	0.	0.	0.	0.	0.	1.	0.	0.	1.	1.
2	1.	0.	1.	0.	0.	2.	1.	0.	2.	2.
3	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
4	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	5.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7	1.	1.	2.	2.	1.	1.	0.	1.	15.	2.
8	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	9.	5.	10.	4.	3.	11.	10.	2.	71.	22.
13	0.	0.	0.	0.	0.	28.	0.	0.	0.	0.
14	14.	6.	19.	9.	9.	33.	17.	5.	30.	42.
15	1.	0.	2.	1.	1.	3.	1.	0.	2.	3.
16	0.	0.	3.	7.	0.	1.	0.	2.	15.	6.
17	1.	5.	4.	0.	8.	0.	0.	0.	129.	2.
18	3.	2.	6.	4.	3.	10.	6.	2.	17.	12.
19	0.	0.	0.	0.	0.	0.	0.	0.	396.	0.
20	1.	7.	6.	10.	2.	3.	0.	1.	24.	3.
21	1.	10.	3.	8.	1.	6.	2.	1.	7.	4.
22	0.	0.	0.	0.	0.	192.	0.	0.	0.	0.
23	0.	0.	0.	0.	0.	0.	0.	0.	1.	39.
24	10.	4.	41.	5.	2.	22.	54.	1.	13.	11.
25	4.	21.	21.	63.	54.	30.	25.	18.	13.	11.
26	4.	2.	14.	7.	2.	38.	5.	1.	11.	14.
27	7.	18.	44.	31.	17.	15.	74.	47.	42.	16.
28	2.	0.	21.	20.	30.	44.	23.	10.	11.	18.
29	1.	0.	1.	1.	1.	2.	1.	0.	3.	3.
30	2.	21.	22.	41.	16.	2.	5.	0.	194.	15.
31	7.	8.	32.	7.	31.	25.	11.	3.	69.	49.
32	47.	69.	88.	239.	79.	101.	82.	91.	860.	73.
33	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.
34	0.	0.	0.	3.	0.	0.	0.	0.	0.	1.
35	1.	4.	5.	10.	104.	38.	135.	1.	366.	1.
36	0.	22.	58.	54.	24.	0.	27.	15.	79.	30.
37	44.	212.	386.	342.	170.	73.	63.	61.	3437.	315.
38	47.	139.	381.	198.	210.	183.	181.	243.	539.	555.
39	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
40	0.	5.	14.	1.	0.	0.	0.	0.	5.	0.
41	53.	103.	87.	163.	81.	227.	127.	22.	1339.	185.
42	45.	128.	121.	181.	62.	170.	73.	26.	1122.	196.
43	0.	3.	19.	0.	0.	0.	0.	0.	111.	3.
44	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
45	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
46	0.	0.	1.	1.	0.	1.	1.	0.	4.	2.
47	25.	22.	74.	47.	23.	98.	35.	22.	541.	296.
48	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.
49	18.	38.	56.	25.	1.	10.	1.	30.	264.	87.
50	0.	0.	5.	5.	0.	35.	0.	0.	391.	570.
51	662.	0.	0.	0.	0.	36.	0.	0.	0.	0.
52	0.	194.	0.	98.	0.	1.	0.	0.	197.	1.

MATRIX U: 1963 80-INDUSTRY LEVEL USE MATRIX

COLUMN	51	52	53	54	55	56	57	58	59	60
ROW										
53	52.	232.	447.	200.	63.	203.	7.	32.	35.	28.
54	0.	0.	0.	70.	0.	1.	0.	0.	1.	1.
55	30.	15.	43.	46.	101.	93.	18.	18.	180.	9.
56	1.	0.	8.	0.	0.	777.	4.	0.	111.	486.
57	239.	0.	110.	0.	1.	1906.	213.	9.	30.	124.
58	0.	35.	11.	0.	92.	17.	0.	98.	317.	33.
59	0.	0.	0.	0.	0.	1.	0.	3.	13166.	1.
60	0.	0.	0.	0.	0.	10.	0.	0.	0.	2262.
61	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
62	1.	47.	10.	101.	1.	7.	1.	1.	226.	214.
63	1.	0.	1.	0.	0.	4.	1.	0.	9.	41.
64	2.	7.	3.	46.	1.	5.	3.	1.	5.	5.
65	40.	46.	98.	77.	55.	124.	63.	34.	683.	168.
66	25.	14.	31.	15.	11.	78.	27.	7.	67.	114.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	14.	17.	50.	31.	20.	49.	37.	15.	165.	88.
69	89.	138.	198.	180.	129.	390.	179.	89.	929.	298.
70	25.	12.	44.	17.	9.	44.	22.	7.	119.	52.
71	52.	19.	55.	25.	24.	122.	45.	12.	76.	65.
72	8.	3.	14.	6.	6.	21.	13.	4.	29.	61.
73	73.	46.	91.	243.	66.	320.	99.	29.	482.	319.
74	4.	3.	7.	2.	3.	17.	5.	2.	388.	21.
75	1.	0.	1.	1.	1.	3.	1.	0.	2.	3.
76	3.	2.	6.	2.	2.	15.	5.	1.	8.	19.
77	6.	4.	7.	9.	3.	22.	7.	2.	39.	20.
78	0.	0.	1.	1.	0.	1.	1.	0.	4.	2.
79	2102.	1086.	3052.	1510.	1322.	6122.	2198.	1019.	11882.	6667.
80	3781.	2778.	5836.	4171.	2849.	11792.	3914.	1991.	39279.	13693.

MATRIX U: 1963 80-INDUSTRY LEVEL USE MATRIX

COLUMN / ROW	61	62	63	64	65	66	67	68	69	70
1	0.	0.	0.	0.	3.	0.	0.	1.	5.	2.
2	1.	5.	0.	12.	9.	1.	1.	2.	16.	6.
3	0.	0.	0.	4.	0.	0.	0.	0.	1.	0.
4	0.	0.	0.	0.	0.	0.	0.	0.	169.	0.
5	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7	2.	0.	3.	1.	9.	0.	0.	635.	0.	0.
8	0.	0.	0.	0.	21.	0.	0.	1820.	0.	0.
9	0.	0.	0.	2.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	7.	7.	4.	15.	1159.	386.	0.	889.	397.	112.
13	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.
14	11.	31.	7.	22.	180.	26.	15.	30.	328.	121.
15	1.	1.	1.	1.	4.	2.	1.	2.	25.	10.
16	1.	55.	2.	102.	0.	0.	0.	0.	0.	0.
17	35.	2.	0.	50.	17.	0.	0.	0.	9.	0.
18	6.	6.	2.	15.	15.	4.	0.	7.	9.	0.
19	18.	0.	0.	0.	0.	0.	0.	0.	7.	0.
20	150.	4.	1.	154.	3.	0.	0.	0.	10.	0.
21	0.	2.	0.	3.	0.	0.	0.	0.	47.	0.
22	29.	0.	0.	17.	0.	0.	0.	0.	0.	0.
23	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.
24	12.	14.	54.	134.	23.	20.	1.	17.	801.	311.
25	2.	24.	15.	123.	10.	0.	0.	0.	566.	0.
26	3.	6.	2.	9.	84.	34.	3.	16.	268.	633.
27	5.	17.	154.	51.	40.	2.	0.	38.	23.	4.
28	13.	9.	10.	186.	0.	0.	0.	0.	35.	0.
29	1.	1.	0.	2.	5.	1.	0.	1.	50.	3.
30	23.	5.	0.	55.	5.	0.	0.	0.	3.	0.
31	12.	9.	3.	23.	1544.	86.	1.	221.	1293.	84.
32	64.	90.	34.	259.	198.	15.	1.	5.	214.	11.
33	0.	1.	0.	16.	0.	0.	0.	0.	0.	0.
34	0.	3.	4.	16.	1.	0.	0.	0.	10.	2.
35	19.	16.	31.	33.	3.	0.	0.	0.	32.	0.
36	20.	10.	5.	21.	8.	0.	0.	0.	23.	0.
37	584.	117.	28.	201.	225.	0.	0.	0.	1.	1.
38	125.	161.	76.	241.	20.	7.	0.	8.	0.	0.
39	0.	11.	0.	0.	0.	0.	0.	0.	0.	0.
40	181.	0.	0.	0.	0.	0.	0.	0.	0.	0.
41	28.	70.	10.	70.	7.	0.	0.	0.	25.	0.
42	117.	72.	16.	107.	103.	0.	0.	0.	42.	2.
43	118.	0.	0.	0.	56.	0.	0.	0.	0.	0.
44	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
45	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.
46	2.	0.	0.	1.	1.	0.	0.	0.	0.	0.
47	22.	44.	0.	0.	20.	0.	0.	0.	5.	0.
48	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
49	180.	13.	0.	0.	13.	0.	0.	0.	0.	0.
50	24.	0.	2.	0.	10.	1.	0.	0.	4.	0.
51	0.	0.	0.	0.	0.	0.	0.	0.	1.	2.
52	10.	0.	0.	1.	1.	0.	0.	0.	0.	0.

MATRIX U: 1963 80-INDUSTRY LEVEL USE MATRIX

COLUMN / ROW	61	62	63	64	65	66	67	68	69	70
53	124.	58.	13.	29.	28.	0.	0.	0.	0.	0.
54	41.	0.	0.	1.	1.	0.	0.	1.	6.	2.
55	12.	23.	5.	12.	13.	0.	0.	24.	41.	0.
56	2.	0.	0.	1.	2.	172.	7.	1.	8.	3.
57	0.	63.	3.	20.	34.	0.	0.	0.	0.	0.
58	5.	2.	0.	0.	83.	3.	0.	1.	51.	2.
59	38.	0.	0.	0.	110.	4.	0.	2.	63.	2.
60	0.	2.	0.	0.	204.	0.	0.	0.	0.	0.
61	387.	0.	0.	0.	255.	0.	0.	0.	0.	0.
62	3.	296.	0.	2.	3.	0.	0.	0.	2.	1.
63	1.	14.	102.	6.	6.	5.	2.	2.	21.	43.
64	4.	14.	1.	526.	11.	9.	1.	4.	92.	84.
65	95.	56.	36.	132.	3242.	56.	25.	611.	1358.	231.
66	14.	34.	16.	37.	370.	99.	102.	80.	1267.	848.
67	0.	0.	0.	0.	0.	0.	13.	0.	0.	0.
68	29.	22.	11.	39.	250.	146.	23.	5529.	2071.	595.
69	156.	155.	87.	329.	1055.	130.	30.	172.	2228.	417.
70	23.	27.	12.	40.	654.	113.	24.	216.	1897.	6063.
71	32.	44.	28.	95.	890.	252.	52.	167.	6416.	1625.
72	8.	13.	6.	15.	37.	17.	7.	15.	412.	59.
73	65.	183.	80.	237.	692.	235.	93.	493.	5687.	2519.
74	4.	5.	2.	7.	608.	104.	1.	44.	972.	78.
75	1.	1.	1.	1.	4.	4.	607.	2.	111.	10.
76	2.	4.	2.	5.	47.	13.	2.	9.	128.	361.
77	5.	8.	4.	17.	77.	65.	3.	81.	533.	627.
78	1.	1.	0.	1.	53.	7.	0.	7.	81.	13.
79	1872.	1884.	1516.	3313.	25582.	11475.	1291.	13983.	88519.	18707.
80	4762.	3717.	2392.	6815.	38107.	13495.	2308.	25135.	116385.	33594.

MATRIX U: 1963 80-INDUSTRY LEVEL USE MATRIX

COLUMN / ROW	71	72	73	74	75	76	77	78	79
1	0.	1.	4.	0.	19.	9.	0.	0.	22502.
2	35.	3.	12.	1.	3.	44.	1.	2.	17691.
3	0.	0.	1.	0.	0.	1.	0.	0.	1411.
4	10.	0.	0.	0.	0.	0.	0.	1.	1755.
5	0.	0.	0.	0.	0.	0.	0.	0.	1343.
6	0.	0.	0.	0.	0.	0.	0.	0.	1239.
7	0.	1.	0.	0.	0.	11.	66.	81.	2099.
8	0.	0.	0.	0.	0.	0.	0.	39.	11616.
9	1.	1.	0.	0.	0.	0.	0.	0.	1910.
10	0.	0.	0.	0.	0.	0.	-0.	2.	391.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	7215.	150.	31.	23.	81.	669.	41.	1307.	14870.
13	0.	1.	1.	0.	0.	1.	0.	0.	202.
14	23.	60.	235.	13.	53.	449.	16.	3.	20062.
15	2.	5.	19.	1.	4.	12.	1.	0.	1930.
16	0.	44.	3.	0.	0.	0.	3.	0.	11293.
17	0.	6.	0.	0.	0.	0.	4.	0.	2261.
18	0.	64.	1.	6.	0.	3.	0.	1.	3718.
19	0.	87.	0.	6.	0.	16.	6.	2.	1380.
20	0.	0.	0.	0.	0.	0.	0.	0.	9926.
21	0.	0.	0.	0.	0.	0.	0.	0.	378.
22	0.	0.	0.	0.	0.	0.	0.	0.	658.
23	0.	0.	0.	0.	0.	0.	0.	0.	280.
24	12.	54.	103.	4.	3.	77.	15.	25.	10755.
25	0.	24.	13.	0.	0.	2.	1.	0.	4391.
26	26.	24.	353.	3.	54.	531.	19.	11.	4875.
27	174.	59.	113.	5.	62.	48.	3.	79.	12714.
28	0.	0.	0.	0.	0.	0.	2.	0.	5059.
29	1.	252.	124.	0.	1.	602.	5.	3.	2105.
30	0.	7.	10.	74.	0.	0.	0.	0.	2216.
31	34.	145.	116.	120.	18.	146.	16.	55.	10086.
32	49.	58.	17.	234.	2.	44.	9.	7.	6672.
33	0.	12.	0.	0.	0.	0.	0.	0.	910.
34	0.	150.	3.	0.	6.	2.	1.	0.	337.
35	0.	0.	0.	73.	0.	4.	0.	0.	2426.
36	0.	62.	11.	108.	0.	3.	1.	19.	8543.
37	0.	0.	0.	0.	0.	0.	0.	12.	22442.
38	0.	5.	2.	0.	0.	0.	0.	0.	12749.
39	0.	0.	0.	0.	0.	0.	0.	0.	2290.
40	27.	0.	0.	0.	0.	0.	0.	0.	7348.
41	0.	0.	0.	122.	0.	2.	2.	0.	3991.
42	0.	53.	13.	83.	0.	3.	0.	1.	7039.
43	0.	0.	100.	33.	0.	0.	0.	0.	1082.
44	0.	0.	86.	0.	0.	0.	0.	0.	469.
45	0.	0.	14.	0.	0.	0.	0.	0.	768.
46	0.	0.	0.	0.	0.	0.	0.	0.	593.
47	0.	0.	19.	1.	0.	0.	0.	1.	2427.
48	0.	0.	0.	0.	0.	0.	0.	0.	640.
49	0.	0.	0.	0.	0.	0.	0.	0.	2691.
50	0.	2.	2.	109.	0.	1.	0.	1.	1954.
51	0.	0.	65.	0.	0.	1.	0.	0.	769.
52	0.	0.	102.	0.	0.	0.	0.	0.	1200.

MATRIX U: 1963 80-INDUSTRY LEVEL USE MATRIX

COLUMN	71	72	73	74	75	76	77	78	79
ROW									
53	0.	32.	116.	16.	0.	0.	0.	2.	3023.
54	0.	147.	4.	0.	1.	3.	1.	0.	581.
55	0.	8.	1.	13.	0.	1.	1.	20.	2127.
56	1.	1.	10.	0.	1.	4.	0.	0.	1959.
57	0.	404.	0.	0.	0.	3.	0.	0.	3268.
58	1.	5.	28.	193.	0.	4.	1.	2.	1189.
59	1.	5.	4.	846.	1.	5.	8.	6.	14444.
60	0.	0.	1.	0.	0.	1.	0.	0.	3072.
61	0.	9.	15.	0.	0.	0.	0.	5.	712.
62	0.	3.	7.	0.	0.	236.	0.	0.	1660.
63	3.	132.	174.	0.	112.	72.	1.	2.	956.
64	7.	324.	122.	1.	37.	69.	2.	3.	2193.
65	115.	189.	430.	103.	99.	343.	659.	86.	23503.
66	102.	128.	377.	70.	54.	403.	9.	32.	6187.
67	0.	0.	0.	0.	0.	17.	0.	0.	30.
68	127.	224.	451.	71.	84.	950.	63.	701.	17015.
69	276.	443.	674.	1277.	144.	621.	42.	40.	30974.
70	1622.	220.	193.	165.	105.	192.	15.	103.	15438.
71	2769.	861.	1342.	303.	721.	2694.	134.	50.	27730.
72	11.	424.	115.	14.	33.	219.	11.	3.	2361.
73	1015.	413.	1362.	116.	343.	662.	106.	247.	29163.
74	40.	127.	174.	37.	19.	151.	16.	13.	3957.
75	2.	7.	18.	1.	1485.	43.	1.	0.	2372.
76	18.	44.	56.	6.	20.	314.	1.	8.	1594.
77	280.	42.	673.	6.	11.	249.	2.	7.	3375.
78	4.	9.	15.	5.	2.	23.	2.	3.	367.
79	61592.	9835.	17592.	6453.	4100.	23198.	4457.	4251.	547872.
80	75594.	15368.	25531.	10717.	7680.	33160.	5743.	7236.	1015579.

MATRIX M: 1963 80-INDUSTRY LEVEL MAKE MATRIX

ROW \ COLUMN	1	2	3	4	5	6	7	8	9	10
1	24694.	0.	117.	0.	0.	0.	0.	0.	0.	0.
2	0.	24788.	117.	550.	0.	0.	0.	0.	0.	0.
3	0.	0.	1517.	0.	0.	0.	0.	0.	0.	0.
4	0.	0.	0.	1215.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	1449.	1.	0.	0.	0.	1.
6	0.	0.	0.	0.	22.	1474.	0.	0.	5.	0.
7	0.	0.	0.	0.	0.	0.	2620.	0.	3.	0.
8	0.	0.	0.	0.	0.	0.	0.	11618.	0.	0.
9	0.	0.	0.	0.	0.	0.	1.	0.	1801.	0.
10	0.	0.	0.	0.	0.	6.	0.	0.	1.	475.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
15	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
17	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
18	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
19	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
21	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
22	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
23	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
25	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
26	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
27	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.
28	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
29	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
31	0.	0.	0.	0.	0.	0.	0.	0.	15.	0.
32	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
33	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
34	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
35	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
36	0.	0.	0.	0.	0.	0.	0.	0.	112.	0.
37	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
38	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
39	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
40	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
41	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
42	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
43	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
44	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
45	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
46	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
47	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
48	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
49	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
51	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
52	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

MATRIX M: 1963 80-INDUSTRY LEVEL MAKE MATRIX

COLUMN	1	2	3	4	5	6	7	8	9	10
ROW										
53	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
54	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
55	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
56	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
57	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
58	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
59	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
60	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
61	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
62	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
63	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
64	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
66	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	0.	0.	0.	0.	0.	0.	0.	25.	0.	0.
69	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
72	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
73	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
74	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
76	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
77	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
78	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
79	24694.	24788.	1751.	1765.	1470.	1482.	2621.	11643.	1937.	480.

MATRIX M: 1963 80-INDUSTRY LEVEL MAKE MATRIX

COLUMN	11	12	13	14	15	16	17	18	19	20
ROW										
1	0.	0.	0.	913.	0.	0.	0.	0.	0.	0.
2	0.	0.	0.	106.	0.	0.	0.	0.	0.	170.
3	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
4	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11	65519.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	0.	19794.	0.	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	4328.	0.	0.	0.	0.	0.	0.	0.
14	0.	0.	0.	72094.	0.	0.	0.	0.	0.	0.
15	0.	0.	0.	0.	7409.	0.	0.	0.	0.	0.
16	0.	0.	0.	11.	0.	12115.	112.	31.	-548.	0.
17	0.	0.	0.	0.	0.	100.	3243.	0.	25.	0.
18	0.	0.	0.	3.	0.	33.	2.	17705.	47.	0.
19	0.	0.	0.	0.	0.	45.	23.	11.	2333.	1.
20	0.	0.	0.	0.	0.	0.	0.	0.	0.	10142.
21	0.	0.	0.	0.	0.	0.	0.	0.	0.	23.
22	0.	0.	0.	0.	0.	0.	3.	0.	2.	19.
23	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.
24	0.	0.	0.	0.	0.	0.	5.	0.	22.	15.
25	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.
26	0.	0.	0.	1.	0.	0.	3.	0.	0.	1.
27	0.	0.	0.	46.	0.	0.	0.	0.	0.	0.
28	0.	0.	0.	0.	0.	0.	27.	0.	0.	0.
29	0.	0.	0.	59.	0.	0.	0.	0.	1.	1.
30	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.
31	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.
32	0.	0.	3.	0.	0.	0.	27.	3.	5.	5.
33	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
34	0.	0.	0.	0.	0.	0.	0.	16.	5.	1.
35	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.
36	0.	0.	0.	0.	0.	1.	5.	0.	1.	6.
37	0.	0.	8.	0.	0.	0.	0.	0.	0.	0.
38	0.	0.	14.	0.	0.	0.	0.	0.	0.	0.
39	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
40	0.	0.	10.	0.	0.	0.	0.	0.	0.	7.
41	0.	0.	30.	0.	0.	0.	0.	0.	1.	11.
42	0.	0.	1.	0.	0.	3.	0.	0.	0.	7.
43	0.	0.	3.	0.	0.	0.	0.	0.	0.	0.
44	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
45	0.	0.	3.	0.	0.	0.	0.	0.	0.	0.
46	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
47	0.	0.	7.	0.	0.	0.	0.	0.	0.	0.
48	0.	0.	1.	1.	0.	0.	0.	0.	0.	1.
49	0.	0.	8.	1.	0.	0.	0.	0.	1.	3.
50	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
51	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.
52	0.	0.	10.	0.	0.	0.	0.	0.	0.	1.

MATRIX M: 1963 80-INDUSTRY LEVEL MAKE MATRIX

COLUMN	11	12	13	14	15	16	17	18	19	20
ROW										
53	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
54	0.	0.	5.	0.	0.	0.	0.	0.	0.	0.
55	0.	0.	46.	0.	0.	0.	1.	0.	0.	0.
56	0.	0.	47.	0.	0.	0.	0.	0.	0.	1.
57	0.	0.	23.	0.	0.	0.	0.	0.	2.	1.
58	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
59	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.
60	0.	0.	1277.	0.	0.	0.	0.	0.	0.	1.
61	0.	0.	17.	0.	0.	0.	0.	0.	0.	1.
62	0.	0.	11.	0.	0.	0.	5.	3.	3.	0.
63	0.	0.	36.	0.	0.	0.	0.	0.	0.	0.
64	0.	0.	0.	4.	0.	0.	1.	8.	13.	16.
65	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
66	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
69	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
72	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
73	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
74	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
76	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
77	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
78	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
79	65519.	19794.	5895.	73241.	7409.	12298.	3458.	17777.	3014.	10437.

MATRIX M: 1963 80-INDUSTRY LEVEL MAKE MATRIX

COLUMN	21	22	23	24	25	26	27	28	29	30
ROW										
1	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
2	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
3	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
4	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.
9	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	191.	0.	0.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.
14	0.	0.	0.	1.	0.	0.	95.	3.	79.	0.
15	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.
17	0.	1.	4.	13.	0.	0.	0.	1.	0.	0.
18	0.	0.	0.	1.	1.	0.	0.	0.	0.	0.
19	0.	2.	1.	19.	0.	0.	0.	0.	0.	0.
20	30.	15.	6.	13.	1.	0.	1.	1.	12.	0.
21	350.	0.	0.	0.	2.	0.	0.	0.	0.	0.
22	2.	3823.	35.	0.	0.	0.	0.	0.	0.	0.
23	0.	24.	1686.	0.	0.	18.	0.	0.	0.	0.
24	0.	0.	0.	12371.	22.	87.	48.	4.	0.	0.
25	1.	0.	2.	52.	4450.	28.	0.	0.	0.	0.
26	0.	0.	0.	74.	34.	8908.	0.	0.	0.	0.
27	0.	0.	0.	15.	0.	18.	13426.	544.	276.	41.
28	0.	0.	0.	14.	5.	0.	300.	4924.	27.	16.
29	0.	0.	0.	3.	0.	1.	219.	4.	7911.	12.
30	0.	0.	0.	0.	0.	0.	47.	22.	6.	2224.
31	0.	0.	0.	0.	0.	0.	941.	88.	20.	3.
32	0.	17.	2.	37.	7.	1.	24.	99.	18.	10.
33	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
34	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
35	0.	0.	0.	0.	7.	0.	0.	0.	0.	1.
36	0.	0.	1.	35.	0.	0.	7.	0.	9.	6.
37	0.	0.	3.	1.	0.	0.	122.	0.	0.	0.
38	0.	0.	2.	13.	5.	0.	57.	0.	0.	1.
39	0.	0.	0.	0.	33.	1.	0.	0.	0.	0.
40	0.	5.	10.	0.	0.	0.	1.	0.	0.	0.
41	0.	5.	5.	0.	16.	1.	0.	0.	0.	0.
42	0.	12.	15.	15.	5.	6.	2.	1.	22.	0.
43	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
44	0.	2.	2.	0.	0.	0.	0.	0.	0.	0.
45	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
46	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
47	0.	0.	1.	0.	0.	0.	6.	0.	0.	0.
48	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
49	0.	0.	2.	0.	0.	5.	17.	0.	0.	0.
50	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
51	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
52	0.	0.	7.	0.	0.	0.	0.	0.	0.	0.

MATRIX M: 1963 80-INDUSTRY LEVEL MAKE MATRIX

COLUMN	21	22	23	24	25	26	27	28	29	30
ROW										
53	0.	0.	1.	0.	0.	0.	13.	0.	0.	0.
54	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.
55	0.	0.	8.	0.	0.	0.	0.	0.	0.	0.
56	0.	0.	3.	1.	0.	0.	1.	0.	1.	0.
57	0.	3.	3.	0.	0.	0.	0.	0.	0.	0.
58	0.	0.	0.	2.	0.	1.	0.	0.	0.	0.
59	0.	0.	0.	1.	0.	2.	1.	0.	0.	0.
60	0.	0.	1.	0.	0.	4.	0.	0.	0.	0.
61	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.
62	0.	4.	14.	4.	0.	1.	0.	0.	57.	0.
63	0.	0.	0.	12.	0.	5.	1.	0.	0.	0.
64	1.	8.	3.	4.	0.	8.	19.	0.	17.	1.
65	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
66	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	0.	0.	0.	0.	0.	0.	34.	0.	0.	0.
69	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
72	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
73	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
74	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
76	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
77	0.	0.	0.	0.	0.	0.	17.	0.	0.	0.
78	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
79	385.	3925.	1820.	12704.	4590.	9100.	15601.	5693.	8457.	2315.

MATRIX M: 1963 80-INDUSTRY LEVEL MAKE MATRIX

COLUMN / ROW	31	32	33	34	35	36	37	38	39	40
1	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
2	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
3	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
4	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8	402.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9	12.	0.	0.	0.	0.	55.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	14.	0.	0.	0.	C.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	5.	0.	0.	18.
14	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.
15	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16	0.	1.	0.	0.	0.	1.	0.	0.	0.	0.
17	0.	48.	0.	0.	0.	0.	0.	0.	0.	0.
18	0.	11.	0.	15.	0.	0.	0.	0.	0.	0.
19	0.	6.	0.	1.	0.	0.	0.	0.	0.	1.
20	0.	1.	0.	0.	4.	2.	3.	0.	0.	6.
21	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
22	0.	3.	0.	0.	14.	0.	0.	0.	0.	2.
23	0.	0.	0.	0.	0.	0.	0.	0.	0.	11.
24	0.	39.	0.	0.	0.	1.	0.	0.	0.	2.
25	0.	9.	0.	0.	0.	0.	0.	0.	0.	0.
26	0.	1.	0.	1.	0.	0.	0.	0.	0.	0.
27	41.	31.	0.	0.	0.	20.	0.	3.	0.	0.
28	0.	203.	0.	0.	0.	0.	0.	0.	0.	0.
29	13.	4.	0.	0.	1.	0.	0.	0.	0.	0.
30	20.	0.	0.	0.	0.	2.	0.	0.	9.	0.
31	19653.	1.	0.	0.	0.	34.	0.	0.	0.	0.
32	1.	8550.	7.	11.	0.	45.	0.	0.	0.	9.
33	0.	5.	942.	4.	0.	0.	0.	0.	0.	0.
34	0.	13.	2.	3325.	0.	0.	0.	0.	0.	0.
35	0.	1.	0.	0.	2820.	2.	0.	0.	0.	1.
36	22.	67.	0.	0.	8.	8744.	12.	0.	5.	7.
37	0.	1.	0.	0.	0.	1.	22663.	102.	0.	179.
38	4.	8.	0.	0.	1.	2.	67.	13054.	0.	51.
39	0.	0.	0.	0.	0.	0.	0.	0.	2291.	11.
40	4.	2.	0.	0.	9.	6.	8.	4.	3.	7597.
41	0.	51.	0.	0.	0.	0.	12.	14.	30.	46.
42	0.	15.	0.	2.	1.	2.	61.	14.	1.	43.
43	0.	0.	0.	0.	0.	0.	2.	11.	0.	15.
44	0.	0.	0.	0.	0.	0.	32.	0.	0.	2.
45	0.	0.	0.	0.	0.	0.	20.	0.	0.	38.
46	0.	0.	0.	0.	0.	0.	1.	0.	0.	14.
47	0.	1.	0.	0.	0.	17.	69.	5.	0.	2.
48	0.	8.	0.	0.	0.	1.	26.	2.	0.	13.
49	0.	1.	0.	0.	0.	3.	7.	4.	0.	42.
50	0.	0.	0.	0.	0.	0.	9.	13.	0.	8.
51	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.
52	0.	0.	0.	0.	0.	5.	0.	3.	0.	78.

MATRIX M: 1963 80-INDUSTRY LEVEL MAKE MATRIX

COLUMN	31	32	33	34	35	36	37	38	39	40
ROW										
53	0.	6.	0.	0.	10.	11.	1.	4.	2.	22.
54	0.	7.	0.	0.	0.	0.	5.	6.	0.	18.
55	0.	0.	0.	0.	0.	0.	5.	29.	0.	0.
56	0.	11.	0.	0.	1.	1.	0.	22.	0.	6.
57	0.	2.	0.	0.	0.	1.	0.	1.	0.	3.
58	0.	0.	0.	0.	0.	0.	4.	50.	0.	1.
59	0.	1.	0.	0.	0.	6.	76.	70.	0.	12.
60	0.	34.	0.	0.	0.	0.	0.	0.	11.	25.
61	0.	0.	0.	0.	0.	0.	1.	0.	0.	75.
62	0.	6.	0.	10.	1.	0.	0.	3.	0.	8.
63	0.	7.	0.	10.	0.	0.	0.	0.	0.	0.
64	3.	54.	0.	12.	1.	11.	1.	1.	0.	2.
65	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
66	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	8.	0.	0.	0.	0.	0.	11.	0.	0.	0.
69	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
72	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
73	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
74	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
76	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
77	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
78	0.	0.	0.	0.	0.	8.	0.	0.	0.	0.
79	20186.	9212.	952.	3395.	2875.	8996.	23102.	13416.	2359.	8369.

MATRIX M: 1963 80-INDUSTRY LEVEL MAKE MATRIX

COLUMN	41	42	43	44	45	46	47	48	49	50
ROW										
1	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
2	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
3	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
4	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
13	20.	5.	12.	0.	0.	0.	1.	6.	0.	0.
14	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.
15	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.
17	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
18	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
19	0.	1.	0.	0.	0.	0.	1.	0.	0.	0.
20	0.	13.	0.	0.	0.	0.	1.	1.	0.	0.
21	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
22	0.	13.	0.	0.	0.	0.	1.	0.	0.	0.
23	6.	7.	0.	0.	0.	3.	0.	0.	0.	0.
24	0.	47.	0.	0.	0.	0.	0.	0.	0.	0.
25	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.
26	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.
27	6.	0.	0.	0.	0.	0.	0.	1.	4.	0.
28	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
29	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
31	0.	12.	0.	0.	0.	0.	0.	0.	0.	0.
32	10.	19.	0.	0.	0.	0.	24.	14.	8.	2.
33	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
34	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.
35	0.	1.	0.	0.	0.	0.	0.	1.	0.	0.
36	1.	2.	0.	0.	1.	0.	34.	1.	8.	7.
37	92.	507.	9.	11.	12.	1.	41.	28.	32.	9.
38	18.	187.	0.	1.	6.	1.	39.	17.	15.	6.
39	18.	1.	0.	0.	0.	0.	1.	0.	0.	0.
40	30.	68.	1.	6.	2.	8.	3.	19.	49.	8.
41	3910.	54.	0.	2.	1.	2.	81.	2.	1.	2.
42	22.	6895.	0.	15.	15.	26.	113.	3.	43.	3.
43	16.	4.	1796.	0.	5.	10.	0.	0.	38.	0.
44	20.	4.	25.	2609.	88.	6.	14.	13.	6.	0.
45	0.	24.	23.	20.	3293.	61.	7.	40.	39.	0.
46	0.	15.	0.	2.	30.	1211.	2.	14.	23.	0.
47	16.	37.	0.	1.	10.	9.	4128.	55.	21.	18.
48	3.	23.	8.	4.	7.	18.	32.	2936.	63.	3.
49	27.	46.	22.	4.	41.	23.	13.	23.	4056.	13.
50	0.	0.	20.	0.	0.	2.	13.	13.	22.	1897.
51	0.	14.	0.	0.	7.	3.	45.	23.	26.	0.
52	1.	20.	0.	1.	2.	9.	3.	2.	39.	0.

MATRIX M: 1963 80-INDUSTRY LEVEL MAKE MATRIX

COLUMN	41	42	43	44	45	46	47	48	49	50
ROW										
53	1.	17.	0.	1.	0.	2.	5.	6.	31.	19.
54	5.	31.	0.	0.	0.	0.	53.	18.	44.	0.
55	0.	5.	0.	0.	0.	0.	0.	9.	0.	0.
56	15.	13.	45.	9.	1.	0.	3.	7.	16.	1.
57	2.	1.	0.	3.	2.	12.	0.	1.	3.	16.
58	1.	12.	15.	1.	1.	2.	2.	7.	9.	0.
59	122.	52.	19.	19.	87.	28.	66.	16.	84.	9.
60	2.	41.	76.	0.	17.	1.	10.	1.	31.	14.
61	0.	11.	32.	14.	21.	1.	1.	14.	17.	7.
62	15.	35.	0.	0.	7.	1.	13.	1.	12.	25.
63	0.	0.	0.	0.	0.	0.	1.	5.	0.	0.
64	9.	21.	0.	13.	0.	0.	10.	2.	1.	0.
65	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
66	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
69	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
72	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
73	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
74	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
76	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
77	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
78	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
79	4396.	8262.	2104.	2739.	3656.	1439.	4761.	3299.	4746.	2063.

MATRIX M: 1963 80-INDUSTRY LEVEL MAKE MATRIX

COLUMN	51	52	53	54	55	56	57	58	59	60
ROW										
1	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
2	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
3	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
4	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.	0.	16.	207.
13	0.	0.	31.	0.	0.	80.	0.	0.	0.	0.
14	0.	3.	0.	0.	0.	0.	0.	0.	0.	0.
15	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
17	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
18	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.
19	0.	0.	0.	0.	1.	0.	0.	0.	3.	0.
20	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
21	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
22	0.	3.	0.	3.	1.	1.	0.	0.	0.	0.
23	8.	0.	0.	0.	0.	0.	0.	0.	0.	0.
24	4.	0.	0.	0.	0.	0.	9.	0.	0.	0.
25	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
26	1.	0.	0.	0.	0.	1.	0.	0.	0.	19.
27	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
28	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
29	0.	3.	0.	7.	0.	0.	0.	0.	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
31	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
32	0.	0.	1.	0.	0.	0.	0.	0.	33.	22.
33	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
34	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
35	0.	0.	0.	3.	6.	0.	0.	0.	0.	0.
36	14.	0.	0.	0.	8.	0.	1.	0.	0.	7.
37	7.	0.	0.	1.	31.	0.	13.	0.	16.	0.
38	0.	9.	37.	2.	31.	41.	10.	10.	8.	24.
39	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
40	0.	100.	1.	32.	22.	2.	3.	0.	18.	5.
41	0.	1.	1.	32.	1.	1.	1.	1.	31.	9.
42	0.	24.	8.	3.	6.	4.	27.	1.	8.	14.
43	0.	0.	58.	0.	0.	0.	0.	0.	64.	34.
44	1.	0.	5.	31.	0.	0.	0.	0.	21.	0.
45	0.	1.	8.	0.	0.	0.	0.	0.	35.	9.
46	0.	7.	1.	8.	0.	0.	8.	0.	13.	11.
47	1.	9.	9.	1.	0.	1.	6.	0.	1.	15.
48	1.	9.	2.	3.	5.	4.	2.	12.	3.	6.
49	13.	32.	5.	11.	1.	35.	35.	0.	39.	8.
50	0.	0.	10.	1.	0.	2.	0.	4.	25.	13.
51	3247.	10.	1.	39.	1.	2.	1.	0.	16.	1.
52	8.	2418.	37.	5.	3.	18.	5.	13.	9.	3.

MATRIX M: 1963 80-INDUSTRY LEVEL MAKE MATRIX

COLUMN	51	52	53	54	55	56	57	58	59	60
ROW										
53	0.	13.	5110.	226.	34.	35.	104.	27.	16.	2.
54	0.	280.	118.	3366.	9.	16.	26.	26.	22.	6.
55	0.	0.	20.	0.	2548.	47.	78.	4.	0.	1.
56	51.	1.	78.	0.	8.	10715.	233.	55.	1.	148.
57	0.	1.	54.	1.	34.	60.	3546.	16.	43.	0.
58	3.	0.	0.	0.	3.	0.	3.	1719.	105.	1.
59	15.	73.	31.	42.	19.	2.	0.	67.	38210.	17.
60	4.	27.	9.	27.	0.	151.	14.	0.	13.	11691.
61	0.	1.	44.	8.	0.	0.	0.	0.	8.	8.
62	9.	0.	79.	8.	6.	55.	21.	16.	21.	14.
63	0.	0.	3.	0.	0.	21.	9.	11.	0.	0.
64	0.	1.	0.	0.	2.	7.	2.	0.	0.	8.
65	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
66	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
69	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
72	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
73	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
74	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
76	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
77	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
78	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
79	3390.	3028.	5761.	3861.	2780.	11303.	4156.	1982.	38801.	12305.

MATRIX M: 1963 80-INDUSTRY LEVEL MAKE MATRIX

COLUMN	61	62	63	64	65	66	67	68	69	70
ROW										
1	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
2	0.	0.	0.	0.	81.	0.	0.	0.	0.	0.
3	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
4	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.	1.	1.	0.
6	0.	0.	0.	0.	0.	0.	0.	1.	2.	0.
7	0.	0.	0.	0.	0.	0.	0.	128.	7.	0.
8	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.
9	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.	0.	19.	0.
13	0.	9.	9.	0.	0.	0.	0.	2.	720.	0.
14	0.	0.	0.	8.	0.	0.	0.	0.	4.	0.
15	0.	0.	0.	0.	0.	0.	0.	2.	14.	0.
16	0.	0.	0.	0.	0.	0.	0.	0.	11.	0.
17	0.	0.	0.	1.	0.	0.	0.	0.	96.	0.
18	0.	1.	0.	2.	0.	0.	0.	0.	36.	0.
19	0.	1.	0.	6.	0.	0.	0.	2.	77.	0.
20	1.	1.	0.	1.	0.	0.	0.	0.	4.	0.
21	0.	0.	0.	1.	0.	0.	0.	0.	23.	0.
22	0.	4.	0.	4.	0.	0.	0.	0.	20.	0.
23	0.	0.	0.	0.	0.	0.	0.	10.	35.	0.
24	0.	7.	1.	9.	0.	0.	0.	1.	14.	0.
25	0.	0.	0.	3.	0.	0.	0.	0.	123.	0.
26	0.	0.	1.	40.	0.	0.	0.	17.	130.	0.
27	0.	0.	1.	9.	0.	0.	0.	2.	9.	0.
28	0.	0.	12.	0.	0.	0.	0.	0.	172.	0.
29	0.	23.	0.	18.	0.	0.	0.	0.	29.	0.
30	0.	0.	0.	1.	0.	0.	0.	2.	65.	0.
31	0.	0.	0.	1.	0.	0.	0.	1.	110.	0.
32	1.	24.	1.	49.	0.	0.	0.	0.	2.	0.
33	0.	0.	0.	0.	0.	0.	0.	0.	17.	0.
34	0.	0.	0.	15.	0.	0.	0.	0.	7.	0.
35	1.	1.	9.	0.	0.	0.	0.	1.	131.	0.
36	0.	1.	0.	2.	0.	0.	0.	58.	46.	0.
37	31.	0.	0.	1.	0.	0.	0.	9.	39.	0.
38	0.	1.	0.	1.	0.	0.	0.	0.	5.	0.
39	0.	0.	0.	0.	0.	0.	0.	0.	119.	0.
40	8.	1.	0.	4.	0.	0.	0.	0.	26.	0.
41	1.	1.	0.	28.	0.	0.	0.	0.	71.	0.
42	6.	13.	1.	9.	0.	0.	0.	2.	15.	0.
43	11.	0.	0.	0.	0.	0.	0.	1.	18.	0.
44	26.	1.	0.	7.	0.	0.	0.	0.	46.	0.
45	1.	0.	0.	0.	0.	0.	0.	0.	18.	0.
46	1.	0.	0.	3.	0.	0.	0.	0.	28.	0.
47	0.	14.	0.	1.	0.	0.	0.	0.	53.	0.
48	2.	5.	1.	2.	0.	0.	0.	0.	53.	0.
49	0.	11.	1.	15.	0.	0.	0.	0.	13.	0.
50	0.	0.	0.	0.	0.	0.	0.	0.	47.	0.
51	8.	0.	0.	0.	0.	0.	0.	0.	36.	0.
52	0.	30.	6.	0.	0.	0.	0.	0.		

MATRIX M: 1963 80-INDUSTRY LEVEL MAKE MATRIX

COLUMN	61	62	63	64	65	66	67	68	69	70
ROW										
53	0.	36.	1.	10.	0.	0.	0.	0.	42.	0.
54	1.	3.	17.	22.	0.	0.	0.	0.	49.	0.
55	0.	7.	12.	6.	0.	0.	0.	0.	22.	0.
56	0.	221.	17.	5.	0.	0.	0.	1.	40.	0.
57	2.	9.	17.	1.	0.	0.	0.	0.	33.	0.
58	1.	0.	0.	0.	0.	0.	0.	0.	39.	0.
59	20.	34.	1.	5.	0.	0.	0.	2.	36.	0.
60	25.	43.	3.	16.	0.	0.	0.	0.	107.	0.
61	4412.	13.	0.	20.	0.	0.	0.	0.	17.	0.
62	0.	3135.	19.	7.	0.	0.	0.	0.	67.	0.
63	0.	17.	2179.	0.	0.	0.	0.	0.	60.	0.
64	10.	18.	1.	6096.	0.	0.	0.	0.	143.	0.
65	0.	0.	0.	0.	37839.	0.	0.	5.	34.	0.
66	0.	0.	0.	0.	0.	12942.	0.	0.	0.	0.
67	0.	0.	0.	0.	0.	0.	74.	0.	0.	0.
68	0.	0.	0.	0.	0.	0.	0.	25004.	0.	0.
69	0.	0.	0.	0.	0.	0.	0.	0.	115326.	0.
70	0.	0.	0.	0.	0.	0.	0.	0.	0.	32554.
71	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
72	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
73	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
74	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
76	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
77	0.	0.	0.	0.	14.	0.	0.	439.	653.	26.
78	0.	0.	0.	0.	940.	0.	0.	3834.	368.	80.
79	4569.	3687.	2311.	6431.	38874.	12942.	74.	29529.	119554.	32660.

MATRIX M: 1963 80-INDUSTRY LEVEL MAKE MATRIX

COLUMN	71	72	73	74	75	76	77	78	79
ROW									
1	960.	0.	0.	0.	0.	0.	0.	0.	26684.
2	1549.	0.	0.	0.	0.	0.	0.	0.	27361.
3	0.	0.	0.	0.	0.	0.	0.	0.	1517.
4	7.	0.	0.	0.	0.	0.	0.	0.	1222.
5	7.	0.	0.	0.	0.	0.	0.	0.	1463.
6	6.	0.	0.	0.	0.	0.	0.	0.	1514.
7	10.	0.	0.	0.	0.	0.	0.	0.	2636.
8	80.	0.	1.	0.	0.	0.	0.	0.	12240.
9	14.	0.	1.	0.	0.	0.	0.	0.	1888.
10	4.	0.	0.	0.	0.	0.	0.	0.	692.
11	0.	0.	0.	0.	0.	0.	0.	0.	65519.
12	0.	0.	0.	0.	0.	0.	0.	0.	19794.
13	1.	0.	0.	0.	0.	0.	0.	0.	4774.
14	107.	0.	0.	0.	0.	0.	0.	0.	73125.
15	6.	0.	0.	0.	0.	0.	0.	0.	7420.
16	18.	0.	0.	0.	0.	0.	0.	0.	12855.
17	3.	0.	0.	0.	0.	0.	0.	0.	3453.
18	36.	0.	0.	0.	0.	0.	0.	0.	17953.
19	1.	0.	0.	0.	0.	0.	0.	0.	2489.
20	27.	0.	0.	0.	0.	0.	0.	0.	10368.
21	2.	0.	0.	0.	0.	0.	0.	0.	384.
22	5.	0.	0.	0.	0.	0.	0.	0.	3965.
23	3.	0.	0.	0.	0.	0.	0.	0.	1788.
24	25.	0.	0.	0.	0.	0.	0.	0.	12763.
25	7.	0.	0.	0.	0.	0.	0.	0.	4573.
26	84.	0.	6743.	0.	0.	0.	0.	0.	16018.
27	64.	0.	0.	0.	0.	0.	0.	0.	14718.
28	33.	0.	0.	0.	0.	0.	0.	0.	5573.
29	54.	0.	0.	0.	0.	0.	0.	0.	8508.
30	8.	0.	0.	0.	0.	0.	0.	0.	2370.
31	456.	0.	0.	0.	0.	0.	0.	0.	21294.
32	19.	0.	0.	0.	0.	0.	0.	0.	9221.
33	2.	0.	0.	0.	0.	0.	0.	0.	956.
34	8.	0.	0.	0.	0.	0.	0.	0.	3407.
35	12.	0.	0.	0.	0.	0.	0.	0.	2877.
36	30.	0.	0.	0.	0.	0.	0.	0.	9299.
37	26.	0.	0.	0.	0.	0.	0.	0.	24051.
38	14.	0.	0.	0.	0.	0.	0.	0.	13806.
39	6.	0.	0.	0.	0.	0.	0.	0.	2369.
40	22.	0.	0.	0.	0.	0.	0.	0.	8198.
41	11.	0.	0.	0.	0.	0.	0.	0.	4425.
42	14.	0.	0.	0.	0.	0.	0.	0.	7572.
43	1.	0.	0.	0.	0.	0.	0.	0.	2087.
44	6.	0.	0.	0.	0.	0.	0.	0.	2940.
45	14.	0.	0.	0.	0.	0.	0.	0.	3687.
46	6.	0.	0.	0.	0.	0.	0.	0.	1391.
47	14.	0.	0.	0.	0.	0.	0.	0.	4502.
48	79.	0.	0.	0.	0.	0.	0.	0.	3338.
49	14.	0.	0.	0.	0.	0.	0.	0.	4634.
50	6.	0.	0.	0.	0.	0.	0.	0.	2072.
51	47.	0.	237.	0.	0.	0.	0.	0.	3781.
52	3.	0.	0.	0.	0.	0.	0.	0.	2778.

MATRIX M: 1963 80-INDUSTRY LEVEL MAKE MATRIX

COLUMN / ROW	71	72	73	74	75	76	77	78	79
53	27.	0.	0.	0.	0.	0.	0.	0.	5836.
54	16.	0.	0.	0.	0.	0.	0.	0.	4171.
55	1.	0.	0.	0.	0.	0.	0.	0.	2849.
56	13.	0.	0.	0.	0.	0.	0.	0.	11792.
57	14.	0.	0.	0.	0.	0.	0.	0.	3914.
58	7.	0.	0.	0.	0.	0.	0.	0.	1991.
59	35.	0.	0.	0.	0.	0.	0.	0.	39279.
60	16.	0.	0.	0.	0.	0.	0.	0.	13693.
61	17.	0.	0.	0.	0.	0.	0.	0.	4762.
62	18.	0.	0.	0.	0.	0.	0.	0.	3717.
63	14.	0.	0.	0.	0.	0.	0.	0.	2392.
64	13.	0.	269.	0.	0.	0.	0.	0.	6815.
65	222.	2.	5.	0.	0.	0.	0.	0.	38107.
66	76.	0.	477.	0.	0.	0.	0.	0.	13495.
67	10.	0.	2224.	0.	0.	0.	0.	0.	2308.
68	49.	0.	3.	0.	0.	0.	0.	0.	25135.
69	984.	0.	75.	0.	0.	0.	0.	0.	116385.
70	989.	0.	51.	0.	0.	0.	0.	0.	33594.
71	75581.	0.	14.	0.	0.	0.	0.	0.	75594.
72	210.	14963.	196.	0.	0.	0.	0.	0.	15368.
73	672.	0.	24859.	0.	0.	0.	0.	0.	25531.
74	91.	0.	5.	10621.	0.	0.	0.	0.	10717.
75	127.	0.	114.	0.	7439.	0.	0.	0.	7680.
76	59.	0.	1.	0.	0.	33100.	0.	0.	33160.
77	48.	0.	0.	0.	17.	0.	4530.	0.	5743.
78	632.	0.	0.	149.	0.	0.	0.	1225.	7236.
79	83873.	14964.	35274.	10770.	7456.	33100.	4530.	1225.	1015579.

MATRIX Y: 1963 80-INDUSTRY LEVEL FINAL DEMAND

ROW	COLUMN 1
1	2192.
2	7096.
3	340.
4	9.
5	127.
6	243.
7	521.
8	27.
9	26.
10	89.
11	65519.
12	4925.
13	5694.
14	53179.
15	5479.
16	1005.
17	1197.
18	14059.
19	1634.
20	511.
21	7.
22	3267.
23	1540.
24	1949.
25	199.
26	4225.
27	2887.
28	634.
29	6351.
30	99.
31	10100.
32	2540.
33	42.
34	3058.
35	448.
36	454.
37	660.
38	667.
39	68.
40	1021.
41	405.
42	1223.
43	1022.
44	2270.
45	2888.
46	846.
47	2334.
48	2660.
49	2055.
50	109.
51	2621.
52	1828.

MATRIX Y: 1963 80-INDUSTRY LEVEL FINAL DEMAND

COLUMN	1
ROW	
53	2738.
54	3280.
55	653.
56	9344.
57	888.
58	793.
59	24357.
60	9232.
61	3857.
62	2028.
63	1354.
64	4238.
65	15371.
66	6755.
67	44.
68	12514.
69	88581.
70	17222.
71	56143.
72	12603.
73	6110.
74	6813.
75	5085.
76	31506.
77	1155.
78	858.
79	547872.

MATRIX : BEA PURE FLOW

COLUMN / ROW	1	2	3	4	5	6	7	8	9	10
1	4396.	1648.	29.	227.	0.	0.	0.	0.	0.	0.
2	7309.	697.	38.	16.	0.	0.	0.	1.	0.	0.
3	0.	0.	35.	0.	0.	0.	0.	0.	0.	0.
4	412.	954.	81.	21.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	54.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	8.	256.	0.	0.	1.	0.
7	5.	1.	0.	0.	5.	1.	408.	1.	3.	0.
8	0.	0.	0.	0.	0.	0.	0.	283.	7.	0.
9	1.	77.	0.	2.	5.	0.	0.	0.	26.	4.
10	0.	32.	0.	1.	0.	0.	0.	0.	0.	21.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	185.	332.	2.	7.	1.	7.	14.	361.	11.	2.
13	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14	3293.	10.	65.	38.	1.	2.	3.	17.	3.	0.
15	0.	1.	0.	0.	0.	0.	0.	1.	0.	0.
16	0.	8.	0.	0.	0.	0.	0.	0.	0.	0.
17	9.	26.	62.	41.	0.	0.	0.	2.	0.	0.
18	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
19	16.	39.	2.	1.	0.	0.	0.	0.	0.	0.
20	2.	2.	0.	0.	3.	10.	17.	0.	0.	0.
21	0.	88.	0.	16.	0.	0.	0.	0.	0.	0.
22	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
23	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
24	11.	1.	1.	0.	0.	1.	1.	3.	8.	1.
25	2.	3.	0.	86.	0.	0.	0.	0.	1.	0.
26	5.	8.	1.	0.	0.	0.	1.	3.	1.	0.
27	53.	1290.	8.	30.	22.	54.	38.	96.	35.	12.
28	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.
29	77.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30	0.	0.	4.	0.	0.	0.	0.	4.	0.	0.
31	157.	864.	39.	23.	11.	7.	23.	61.	37.	4.
32	27.	104.	2.	2.	7.	10.	32.	15.	67.	1.
33	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
34	7.	0.	0.	3.	0.	0.	0.	0.	0.	0.
35	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.
36	1.	35.	1.	1.	4.	2.	3.	39.	16.	0.
37	0.	0.	0.	0.	22.	26.	39.	28.	28.	9.
38	1.	1.	0.	0.	1.	0.	0.	0.	3.	1.
39	7.	11.	21.	0.	0.	0.	0.	0.	0.	0.
40	0.	0.	0.	0.	0.	1.	0.	17.	2.	0.
41	23.	0.	0.	0.	0.	0.	0.	0.	0.	0.
42	19.	28.	15.	132.	1.	4.	12.	13.	5.	0.
43	0.	0.	0.	0.	8.	11.	36.	15.	36.	3.
44	5.	207.	1.	5.	0.	0.	0.	0.	0.	0.
45	0.	0.	0.	0.	24.	29.	84.	23.	46.	11.
46	0.	0.	0.	0.	0.	3.	1.	0.	15.	3.
47	0.	0.	0.	0.	1.	1.	5.	0.	0.	0.
48	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
49	0.	0.	0.	0.	0.	1.	2.	23.	22.	1.
50	3.	6.	0.	0.	1.	31.	11.	0.	7.	1.
51	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
52	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

MATRIX : BEA PURE FLOW

COLUMN	1	2	3	4	5	6	7	8	9	10
ROW										
53	0.	0.	0.	0.	0.	1.	7.	77.	7.	3.
54	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
55	1.	1.	36.	0.	0.	1.	11.	0.	1.	1.
56	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.
57	0.	0.	0.	0.	0.	0.	0.	14.	0.	0.
58	5.	23.	2.	1.	0.	0.	1.	1.	1.	0.
59	6.	13.	0.	0.	2.	2.	8.	3.	14.	1.
60	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
61	0.	4.	21.	0.	0.	2.	9.	0.	0.	0.
62	0.	0.	1.	0.	0.	0.	0.	4.	0.	0.
63	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
64	2.	2.	0.	0.	0.	1.	0.	1.	0.	0.
65	568.	291.	55.	38.	127.	32.	51.	293.	44.	28.
66	48.	75.	1.	2.	1.	2.	4.	8.	1.	2.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	89.	185.	1.	5.	27.	40.	65.	115.	63.	25.
69	806.	765.	65.	60.	22.	28.	58.	141.	56.	10.
70	144.	285.	5.	12.	7.	24.	28.	89.	29.	4.
71	267.	1830.	10.	82.	110.	41.	73.	2132.	44.	8.
72	2.	4.	2.	2.	0.	1.	1.	8.	2.	0.
73	128.	758.	5.	17.	33.	14.	28.	103.	24.	4.
74	70.	146.	8.	4.	1.	2.	8.	40.	18.	1.
75	0.	1.	0.	0.	0.	0.	0.	1.	0.	0.
76	167.	12.	1.	0.	1.	1.	2.	5.	1.	1.
77	4.	4.	0.	0.	1.	1.	2.	5.	1.	1.
78	0.	1.	0.	0.	1.	1.	1.	3.	2.	1.
79	6357.	13915.	1128.	888.	957.	830.	1535.	7584.	1245.	311.
80	24694.	24788.	1751.	1765.	1470.	1482.	2621.	11643.	1937.	480.

MATRIX : BEA PURE FLOW

ROW \ COLUMN	11	12	13	14	15	16	17	18	19	20
1	2.	1.	0.	15346.	0.	49.	171.	1.	3.	12.
2	328.	2.	1.	6180.	1123.	1253.	39.	5.	57.	5.
3	0.	0.	0.	300.	0.	0.	0.	114.	0.	896.
4	3.	0.	0.	19.	0.	0.	0.	0.	0.	7.
5	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	2.	39.	2.	12.	2.	2.	1.	2.
8	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9	478.	259.	0.	8.	0.	0.	0.	0.	0.	1.
10	0.	0.	0.	6.	0.	0.	0.	0.	0.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	17.	7.	8.	155.	7.	28.	9.	15.	5.	37.
13	5.	0.	146.	0.	0.	0.	0.	0.	0.	0.
14	122.	44.	16.	12897.	11.	42.	23.	25.	6.	10.
15	8.	3.	1.	5.	1762.	1.	0.	2.	0.	1.
16	31.	0.	1.	8.	0.	4078.	548.	4826.	853.	2.
17	124.	3.	1.	3.	0.	401.	242.	60.	291.	1.
18	29.	13.	5.	46.	0.	7.	26.	3155.	22.	14.
19	7.	0.	0.	95.	0.	7.	70.	267.	256.	0.
20	3554.	724.	16.	9.	1.	0.	1.	0.	10.	3115.
21	0.	0.	5.	86.	5.	0.	0.	0.	0.	2.
22	342.	0.	1.	0.	0.	0.	0.	0.	0.	0.
23	184.	4.	4.	0.	0.	0.	0.	0.	0.	0.
24	212.	73.	7.	901.	35.	53.	43.	15.	9.	16.
25	4.	0.	10.	1124.	91.	67.	29.	126.	31.	18.
26	12.	5.	8.	471.	58.	5.	2.	12.	2.	4.
27	201.	54.	20.	217.	2.	325.	27.	15.	17.	102.
28	1.	0.	4.	102.	77.	1044.	513.	347.	80.	18.
29	5.	1.	1.	163.	6.	33.	8.	11.	2.	1.
30	308.	859.	2.	0.	0.	7.	0.	0.	1.	51.
31	1119.	540.	18.	217.	2.	21.	8.	17.	3.	52.
32	487.	139.	101.	255.	0.	30.	46.	27.	94.	12.
33	0.	0.	0.	2.	0.	1.	0.	42.	1.	2.
34	2.	1.	0.	1.	0.	0.	0.	1.	0.	0.
35	81.	93.	4.	767.	0.	39.	1.	0.	2.	14.
36	5813.	410.	4.	1.	0.	0.	1.	0.	0.	48.
37	2125.	317.	178.	3.	0.	1.	1.	0.	4.	54.
38	1244.	209.	231.	2.	0.	0.	1.	0.	4.	10.
39	0.	0.	0.	1572.	9.	0.	0.	0.	0.	0.
40	6159.	569.	1.	0.	0.	0.	0.	0.	0.	0.
41	112.	19.	27.	199.	0.	0.	0.	0.	0.	8.
42	975.	269.	54.	215.	42.	4.	2.	18.	4.	164.
43	26.	0.	1.	0.	0.	0.	0.	0.	0.	0.
44	2.	1.	0.	1.	0.	0.	0.	0.	0.	1.
45	238.	71.	0.	0.	0.	0.	0.	0.	0.	0.
46	257.	96.	1.	7.	0.	2.	0.	2.	0.	4.
47	11.	0.	44.	0.	0.	0.	0.	0.	0.	0.
48	0.	0.	0.	35.	0.	71.	11.	7.	3.	31.
49	210.	43.	22.	4.	0.	1.	0.	1.	0.	1.
50	12.	1.	66.	4.	0.	0.	0.	0.	0.	1.
51	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
52	404.	116.	1.	0.	0.	0.	0.	0.	0.	0.

MATRIX : BEA PURE FLOW

COLUMN	11	12	13	14	15	16	17	18	19	20
ROW										
53	337.	56.	29.	0.	0.	0.	0.	0.	0.	0.
54	185.	100.	1.	1.	0.	0.	0.	0.	0.	0.
55	1123.	183.	3.	1.	0.	0.	0.	0.	0.	0.
56	81.	21.	261.	2.	0.	0.	0.	1.	0.	0.
57	1.	1.	96.	0.	0.	0.	0.	0.	0.	0.
58	37.	10.	21.	7.	0.	0.	0.	0.	0.	1.
59	36.	14.	1.	15.	0.	0.	0.	1.	0.	3.
60	0.	0.	747.	0.	0.	0.	0.	0.	0.	0.
61	4.	0.	1.	0.	0.	0.	0.	0.	0.	0.
62	208.	70.	47.	8.	1.	3.	1.	8.	1.	3.
63	6.	1.	21.	6.	1.	2.	0.	4.	1.	2.
64	94.	79.	3.	13.	1.	5.	38.	345.	6.	4.
65	2290.	553.	64.	2555.	47.	221.	82.	146.	39.	359.
66	180.	79.	60.	191.	3.	25.	9.	76.	12.	30.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	205.	90.	34.	494.	8.	124.	24.	64.	18.	84.
69	5474.	1711.	126.	2612.	67.	434.	202.	641.	158.	274.
70	401.	161.	31.	383.	15.	47.	14.	88.	18.	83.
71	307.	134.	36.	383.	13.	60.	22.	213.	28.	93.
72	46.	20.	21.	207.	16.	9.	4.	15.	5.	5.
73	2959.	281.	136.	2187.	312.	118.	39.	234.	34.	142.
74	235.	101.	11.	183.	1.	5.	2.	11.	2.	30.
75	7.	3.	1.	5.	1.	1.	0.	2.	0.	1.
76	59.	26.	9.	42.	1.	3.	1.	10.	2.	4.
77	18.	8.	12.	51.	13.	10.	4.	46.	5.	6.
78	28.	10.	1.	25.	0.	2.	1.	1.	1.	2.
79	25940.	11137.	3110.	22402.	3675.	3643.	1190.	6758.	920.	4590.
80	65519.	19794.	5895.	73241.	7409.	12298.	3458.	17777.	3014.	10437.

MATRIX : BEA PURE FLOW

COLUMN	21	22	23	24	25	26	27	28	29	30
ROW										
1	0.	0.	0.	1.	0.	1.	21.	1.	19.	0.
2	0.	0.	0.	1.	0.	2.	25.	1.	16.	1.
3	3.	1.	1.	1.	0.	0.	26.	1.	3.	0.
4	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	82.	3.	2.	0.
6	0.	0.	0.	1.	0.	0.	77.	3.	1.	0.
7	0.	1.	1.	74.	1.	1.	68.	24.	5.	1.
8	0.	0.	0.	0.	0.	0.	445.	40.	9.	1.
9	0.	0.	0.	57.	1.	0.	36.	2.	4.	5.
10	0.	0.	0.	12.	0.	0.	263.	10.	7.	1.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	1.	5.	3.	45.	12.	15.	95.	26.	26.	6.
13	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14	1.	8.	3.	136.	5.	50.	194.	32.	272.	107.
15	0.	1.	0.	1.	0.	3.	3.	1.	2.	1.
16	0.	208.	5.	77.	0.	3.	4.	3.	3.	1.
17	0.	103.	31.	22.	0.	14.	1.	4.	1.	0.
18	1.	7.	3.	10.	5.	0.	7.	3.	4.	1.
19	0.	1.	0.	2.	0.	0.	14.	1.	0.	0.
20	125.	541.	142.	767.	6.	22.	42.	5.	5.	0.
21	12.	1.	1.	0.	0.	0.	4.	2.	2.	1.
22	0.	70.	5.	0.	0.	0.	0.	0.	0.	0.
23	0.	1.	40.	0.	0.	0.	0.	0.	0.	0.
24	1.	4.	3.	2227.	1828.	1446.	172.	192.	76.	3.
25	1.	52.	29.	334.	135.	39.	97.	42.	204.	19.
26	0.	3.	2.	42.	14.	1020.	11.	3.	35.	2.
27	0.	8.	2.	443.	83.	211.	2879.	1692.	709.	444.
28	0.	10.	1.	175.	35.	21.	58.	109.	6.	201.
29	0.	1.	0.	13.	1.	2.	28.	17.	481.	10.
30	0.	89.	35.	0.	1.	14.	16.	1.	6.	1.
31	1.	6.	4.	103.	34.	25.	188.	32.	40.	97.
32	0.	231.	87.	147.	6.	42.	15.	10.	256.	1.
33	0.	4.	2.	2.	0.	0.	3.	1.	0.	0.
34	0.	0.	0.	0.	0.	1.	1.	0.	1.	0.
35	0.	27.	39.	0.	1.	1.	14.	1.	153.	0.
36	0.	1.	14.	18.	0.	1.	30.	1.	11.	6.
37	31.	96.	177.	5.	18.	6.	130.	5.	8.	6.
38	0.	33.	22.	7.	17.	6.	170.	8.	8.	22.
39	0.	0.	0.	0.	0.	0.	158.	21.	173.	140.
40	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
41	1.	8.	20.	1.	1.	1.	3.	0.	31.	0.
42	3.	252.	69.	150.	16.	13.	92.	6.	59.	1.
43	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.
44	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
45	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.
46	0.	1.	0.	5.	1.	1.	8.	1.	1.	0.
47	0.	0.	1.	0.	0.	0.	1.	0.	1.	0.
48	2.	0.	0.	29.	8.	19.	136.	6.	3.	0.
49	0.	0.	1.	24.	0.	1.	10.	1.	1.	0.
50	0.	0.	3.	0.	0.	1.	2.	0.	1.	0.
51	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
52	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.

MATRIX : BEA PURE FLOW

COLUMN	21	22	23	24	25	26	27	28	29	30
ROW										
53	0.	0.	2.	0.	0.	0.	17.	1.	1.	0.
54	0.	0.	0.	0.	0.	1.	1.	0.	1.	0.
55	0.	1.	2.	0.	0.	0.	1.	0.	3.	0.
56	0.	0.	0.	0.	0.	1.	1.	0.	1.	0.
57	0.	0.	1.	0.	0.	0.	0.	0.	1.	0.
58	0.	0.	0.	0.	0.	1.	1.	0.	0.	0.
59	0.	0.	0.	1.	0.	2.	2.	0.	1.	0.
60	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
61	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
62	0.	2.	2.	2.	1.	2.	2.	1.	9.	0.
63	0.	1.	0.	3.	1.	75.	2.	1.	1.	0.
64	0.	3.	1.	3.	1.	17.	5.	1.	4.	1.
65	21.	101.	41.	509.	153.	171.	547.	148.	189.	68.
66	1.	19.	12.	39.	21.	106.	64.	23.	40.	13.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	4.	23.	14.	270.	30.	51.	553.	86.	46.	13.
69	12.	173.	72.	425.	102.	220.	512.	183.	308.	119.
70	2.	35.	23.	73.	17.	67.	105.	35.	56.	15.
71	4.	84.	29.	83.	48.	492.	121.	45.	85.	21.
72	1.	6.	2.	25.	11.	36.	27.	9.	46.	14.
73	4.	83.	34.	205.	82.	283.	405.	164.	1212.	66.
74	1.	5.	3.	10.	5.	19.	15.	4.	6.	2.
75	0.	1.	0.	1.	0.	3.	3.	1.	2.	1.
76	0.	3.	2.	5.	3.	17.	9.	3.	5.	2.
77	0.	5.	3.	12.	4.	100.	14.	4.	18.	4.
78	0.	0.	0.	5.	0.	3.	7.	2.	1.	0.
79	151.	1605.	826.	6094.	1876.	4445.	7551.	2672.	3774.	896.
80	385.	3925.	1820.	12704.	4590.	9100.	15601.	5693.	8457.	2315.

MATRIX : BEA PURE FLOW

COLUMN	31	32	33	34	35	36	37	38	39	40
ROW										
1	0.	3.	56.	0.	0.	0.	0.	0.	1.	0.
2	1.	2.	0.	0.	0.	8.	1.	1.	1.	1.
3	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.
4	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	16.	1101.	19.	0.	9.
6	0.	1.	0.	0.	0.	0.	6.	842.	0.	3.
7	9.	10.	2.	0.	3.	78.	443.	15.	0.	5.
8	8696.	1.	0.	0.	0.	15.	1.	0.	0.	0.
9	64.	15.	0.	0.	37.	699.	67.	18.	0.	2.
10	1.	1.	0.	0.	1.	11.	11.	0.	0.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	336.	27.	1.	4.	13.	44.	165.	43.	3.	16.
13	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.
14	34.	24.	237.	8.	5.	22.	22.	18.	4.	22.
15	1.	2.	0.	0.	0.	1.	2.	1.	0.	2.
16	0.	182.	0.	101.	1.	14.	0.	12.	0.	1.
17	0.	326.	0.	105.	0.	17.	1.	13.	0.	4.
18	3.	13.	0.	20.	4.	9.	20.	7.	2.	9.
19	0.	2.	0.	29.	0.	19.	1.	1.	0.	1.
20	4.	30.	1.	38.	56.	27.	32.	21.	2.	21.
21	0.	3.	0.	2.	11.	2.	3.	2.	0.	9.
22	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.
23	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
24	97.	37.	0.	17.	3.	140.	11.	21.	1.	16.
25	57.	148.	3.	54.	131.	40.	17.	13.	43.	42.
26	6.	6.	0.	3.	2.	6.	10.	4.	86.	7.
27	515.	403.	32.	2.	128.	152.	391.	142.	10.	41.
28	2.	1486.	2.	11.	0.	75.	1.	122.	4.	3.
29	51.	3.	39.	7.	0.	24.	2.	1.	2.	6.
30	0.	11.	0.	0.	6.	0.	1.	2.	67.	86.
31	1501.	22.	3.	3.	8.	78.	150.	79.	4.	27.
32	3.	421.	1.	297.	62.	58.	19.	21.	7.	13.
33	2.	4.	177.	589.	0.	3.	5.	2.	0.	1.
34	0.	1.	0.	98.	0.	0.	0.	0.	0.	0.
35	0.	22.	0.	1.	186.	0.	1.	3.	0.	68.
36	34.	15.	1.	0.	69.	1002.	35.	35.	1.	17.
37	4.	66.	0.	8.	10.	111.	4653.	73.	968.	1926.
38	45.	28.	0.	3.	17.	24.	470.	4633.	37.	617.
39	125.	3.	0.	0.	0.	1.	1.	0.	1.	0.
40	1.	0.	0.	0.	1.	10.	1.	0.	0.	174.
41	0.	13.	0.	0.	2.	2.	136.	33.	18.	121.
42	7.	53.	1.	29.	2.	95.	350.	57.	5.	291.
43	1.	0.	0.	0.	0.	2.	3.	1.	0.	5.
44	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.
45	1.	0.	0.	0.	0.	45.	1.	0.	0.	2.
46	4.	2.	0.	1.	1.	13.	12.	4.	0.	3.
47	0.	7.	0.	0.	3.	11.	21.	68.	3.	37.
48	0.	6.	0.	0.	0.	0.	21.	5.	0.	1.
49	3.	2.	0.	0.	0.	10.	122.	39.	0.	54.
50	0.	7.	0.	0.	0.	1.	157.	94.	0.	5.
51	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
52	0.	0.	0.	0.	0.	0.	15.	1.	0.	61.

MATRIX : BEA PURE FLOW

ROW \ COLUMN	31	32	33	34	35	36	37	38	39	40
53	3.	2.	0.	0.	1.	2.	134.	26.	0.	108.
54	0.	1.	0.	0.	0.	0.	1.	0.	0.	1.
55	0.	1.	0.	0.	0.	14.	1.	5.	0.	1.
56	0.	2.	0.	0.	0.	1.	1.	2.	0.	3.
57	1.	3.	0.	0.	0.	0.	0.	4.	0.	2.
58	0.	0.	0.	0.	0.	1.	2.	5.	0.	2.
59	1.	4.	0.	0.	0.	5.	27.	24.	0.	5.
60	0.	6.	0.	0.	0.	0.	1.	0.	2.	6.
61	0.	0.	0.	0.	0.	0.	0.	0.	0.	6.
62	1.	4.	0.	3.	1.	2.	21.	4.	1.	52.
63	1.	2.	0.	1.	1.	1.	3.	1.	0.	3.
64	2.	18.	0.	56.	5.	16.	32.	9.	0.	4.
65	919.	206.	15.	43.	73.	530.	1121.	340.	62.	183.
66	24.	33.	2.	15.	10.	45.	99.	44.	4.	54.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	361.	107.	9.	13.	111.	295.	585.	312.	17.	68.
69	379.	304.	35.	113.	109.	241.	713.	416.	73.	290.
70	202.	50.	6.	22.	21.	75.	205.	70.	17.	55.
71	461.	76.	10.	28.	24.	61.	55.	55.	17.	107.
72	13.	21.	0.	4.	5.	13.	22.	9.	3.	36.
73	458.	231.	8.	86.	66.	190.	317.	142.	47.	149.
74	9.	8.	0.	3.	3.	27.	19.	8.	1.	10.
75	1.	2.	0.	0.	0.	1.	2.	1.	0.	2.
76	3.	6.	0.	2.	1.	6.	9.	4.	1.	7.
77	13.	10.	1.	12.	4.	8.	15.	7.	1.	9.
78	2.	2.	0.	0.	1.	2.	8.	3.	0.	1.
79	5719.	4705.	305.	1556.	1671.	4571.	11227.	5457.	839.	3473.
80	20186.	9212.	952.	3395.	2875.	8996.	23102.	13416.	2359.	8369.

MATRIX : BEA PURE FLOW

ROW \ COLUMN	41	42	43	44	45	46	47	48	49	50
1	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.
2	0.	1.	0.	0.	0.	0.	1.	1.	1.	0.
3	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.
4	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	5.	25.	0.	1.	1.	0.	2.	1.	2.	0.
6	1.	12.	0.	0.	0.	0.	3.	1.	1.	0.
7	3.	13.	2.	2.	2.	0.	2.	1.	2.	0.
8	0.	5.	0.	0.	0.	0.	0.	0.	0.	0.
9	0.	4.	0.	0.	0.	0.	3.	0.	1.	1.
10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	7.	17.	4.	3.	6.	2.	11.	5.	9.	7.
13	1.	0.	1.	0.	0.	0.	0.	0.	0.	0.
14	8.	22.	5.	5.	8.	3.	14.	9.	13.	7.
15	1.	2.	0.	0.	1.	0.	1.	1.	1.	1.
16	1.	3.	0.	0.	0.	2.	1.	2.	1.	2.
17	1.	42.	0.	0.	1.	0.	2.	2.	1.	0.
18	5.	10.	2.	2.	3.	1.	6.	4.	5.	3.
19	1.	1.	0.	0.	1.	0.	1.	0.	1.	0.
20	33.	53.	3.	8.	4.	2.	7.	14.	10.	2.
21	3.	5.	1.	1.	1.	0.	1.	1.	2.	1.
22	0.	1.	1.	0.	0.	0.	0.	0.	0.	0.
23	0.	0.	0.	2.	0.	0.	0.	0.	0.	0.
24	18.	25.	1.	2.	2.	1.	5.	3.	7.	2.
25	48.	85.	8.	9.	6.	3.	14.	5.	15.	9.
26	4.	7.	2.	2.	3.	1.	4.	3.	5.	2.
27	31.	128.	5.	8.	7.	4.	19.	12.	19.	6.
28	24.	7.	0.	1.	0.	0.	6.	7.	2.	1.
29	3.	5.	1.	0.	1.	0.	2.	2.	1.	1.
30	26.	63.	1.	14.	12.	5.	5.	2.	5.	0.
31	18.	26.	10.	7.	10.	5.	21.	23.	28.	6.
32	56.	108.	8.	53.	77.	43.	28.	38.	29.	9.
33	1.	1.	0.	13.	1.	0.	1.	3.	3.	0.
34	0.	9.	0.	0.	0.	0.	0.	0.	0.	0.
35	3.	10.	0.	1.	1.	1.	1.	1.	2.	1.
36	17.	68.	16.	8.	13.	3.	53.	9.	38.	20.
37	904.	1109.	218.	381.	599.	175.	433.	309.	561.	184.
38	256.	604.	89.	23.	46.	29.	121.	85.	182.	87.
39	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
40	1.	3.	5.	1.	35.	8.	19.	57.	37.	1.
41	97.	92.	53.	78.	49.	22.	56.	31.	41.	17.
42	54.	331.	27.	34.	74.	20.	38.	55.	102.	43.
43	3.	2.	171.	124.	110.	14.	1.	24.	19.	0.
44	1.	0.	1.	130.	4.	0.	1.	1.	0.	0.
45	0.	1.	1.	1.	147.	3.	0.	2.	2.	0.
46	1.	3.	7.	1.	3.	94.	4.	2.	3.	1.
47	37.	81.	58.	38.	114.	24.	356.	68.	89.	70.
48	4.	2.	1.	0.	0.	1.	3.	197.	4.	0.
49	9.	23.	69.	232.	218.	75.	167.	154.	362.	6.
50	3.	8.	60.	74.	20.	27.	4.	11.	7.	206.
51	0.	3.	0.	0.	1.	1.	8.	4.	5.	0.
52	1.	3.	0.	0.	1.	1.	2.	1.	5.	0.

MATRIX S: BEA PURE FLOW

COLUMN	41	42	43	44	45	46	47	48	49	50
ROW										
53	6.	42.	25.	8.	48.	54.	122.	96.	108.	7.
54	0.	1.	0.	4.	0.	0.	1.	1.	1.	0.
55	2.	3.	1.	10.	1.	0.	2.	1.	4.	0.
56	3.	3.	6.	1.	1.	0.	1.	1.	3.	1.
57	3.	8.	8.	2.	1.	1.	4.	3.	11.	2.
58	2.	2.	34.	26.	5.	4.	1.	1.	4.	11.
59	41.	18.	11.	27.	37.	10.	22.	6.	29.	3.
60	3.	7.	14.	0.	3.	0.	4.	1.	5.	2.
61	0.	1.	3.	2.	2.	0.	0.	1.	1.	1.
62	4.	8.	8.	4.	3.	1.	5.	7.	32.	3.
63	1.	2.	1.	1.	1.	0.	1.	1.	1.	1.
64	2.	18.	1.	2.	1.	1.	4.	2.	3.	1.
65	85.	168.	33.	58.	62.	27.	68.	51.	72.	34.
66	24.	39.	10.	10.	16.	8.	26.	18.	27.	10.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	44.	98.	13.	17.	26.	8.	43.	22.	40.	19.
69	116.	276.	74.	110.	131.	57.	154.	127.	160.	58.
70	34.	64.	9.	22.	37.	10.	35.	25.	27.	19.
71	48.	86.	5.	12.	22.	15.	44.	85.	37.	28.
72	7.	16.	4.	6.	7.	3.	12.	7.	10.	5.
73	79.	172.	39.	73.	57.	27.	94.	56.	93.	41.
74	5.	9.	3.	3.	5.	2.	6.	4.	6.	2.
75	1.	2.	0.	0.	1.	0.	1.	1.	1.	1.
76	3.	6.	2.	2.	3.	1.	4.	3.	5.	2.
77	5.	10.	3.	4.	5.	2.	7.	5.	7.	3.
78	1.	2.	0.	0.	1.	0.	0.	0.	1.	0.
79	2187.	4177.	963.	1073.	1598.	634.	2672.	1623.	2434.	1112.
80	4396.	8262.	2104.	2739.	3656.	1439.	4761.	3299.	4746.	2063.

MATRIX 8: BEA PURE FLOW

ROW \ COLUMN	51	52	53	54	55	56	57	58	59	60
1	0.	1.	0.	0.	0.	1.	0.	0.	1.	1.
2	1.	1.	1.	1.	0.	2.	1.	0.	2.	2.
3	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
4	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	6.	0.	1.	0.	1.	0.
6	0.	1.	2.	0.	2.	3.	1.	1.	1.	2.
7	1.	1.	2.	2.	1.	2.	1.	1.	15.	2.
8	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9	1.	0.	0.	0.	1.	0.	1.	0.	2.	1.
10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	8.	6.	10.	4.	3.	11.	10.	2.	71.	20.
13	0.	0.	1.	0.	0.	28.	1.	0.	1.	7.
14	12.	7.	19.	9.	8.	32.	17.	5.	31.	38.
15	1.	1.	1.	1.	1.	3.	1.	0.	2.	3.
16	0.	1.	4.	6.	0.	2.	1.	2.	16.	6.
17	1.	5.	4.	1.	7.	0.	1.	0.	127.	3.
18	2.	3.	6.	3.	3.	10.	6.	2.	17.	11.
19	0.	1.	0.	0.	0.	0.	0.	1.	385.	0.
20	2.	8.	7.	10.	3.	4.	1.	1.	25.	4.
21	1.	9.	3.	6.	1.	6.	2.	1.	7.	4.
22	1.	0.	2.	0.	0.	175.	4.	1.	0.	2.
23	0.	0.	0.	0.	0.	0.	0.	0.	1.	34.
24	10.	5.	38.	7.	3.	23.	52.	2.	14.	11.
25	4.	23.	22.	53.	50.	30.	27.	17.	17.	12.
26	4.	3.	13.	6.	2.	35.	6.	1.	11.	13.
27	7.	20.	43.	29.	18.	19.	71.	42.	47.	21.
28	2.	2.	20.	17.	27.	43.	24.	9.	18.	20.
29	1.	1.	1.	1.	1.	2.	1.	0.	3.	3.
30	2.	23.	21.	35.	15.	3.	6.	1.	190.	14.
31	7.	8.	30.	8.	28.	25.	13.	4.	70.	44.
32	42.	80.	91.	200.	74.	101.	83.	84.	850.	72.
33	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.
34	0.	0.	0.	3.	0.	1.	0.	0.	0.	1.
35	1.	6.	9.	9.	95.	39.	126.	3.	358.	2.
36	2.	24.	55.	47.	23.	3.	28.	14.	80.	27.
37	45.	250.	378.	320.	171.	90.	87.	67.	3394.	297.
38	44.	152.	370.	184.	207.	206.	191.	221.	557.	500.
39	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
40	1.	8.	14.	3.	1.	1.	1.	0.	6.	1.
41	48.	106.	91.	140.	76.	215.	126.	25.	1313.	165.
42	42.	133.	121.	156.	60.	165.	78.	28.	1102.	175.
43	0.	3.	24.	3.	0.	0.	1.	0.	116.	6.
44	0.	0.	0.	2.	0.	0.	0.	0.	1.	0.
45	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.
46	0.	1.	1.	1.	0.	1.	1.	0.	5.	3.
47	23.	27.	73.	44.	22.	96.	39.	22.	535.	259.
48	0.	1.	0.	0.	1.	0.	0.	1.	0.	1.
49	18.	40.	56.	28.	2.	14.	6.	27.	270.	80.
50	1.	3.	9.	7.	1.	39.	2.	1.	387.	491.
51	568.	2.	0.	7.	0.	33.	1.	0.	3.	1.
52	1.	176.	6.	80.	1.	2.	1.	2.	193.	2.

MATRIX ": BEA PURE FLOW

COLUMN	51	52	53	54	55	56	57	58	59	60
ROW										
53	47.	220.	406.	181.	60.	194.	24.	34.	43.	31.
54	0.	5.	3.	57.	0.	1.	1.	1.	1.	1.
55	26.	17.	42.	40.	92.	88.	22.	18.	177.	9.
56	5.	1.	14.	2.	1.	715.	20.	4.	109.	435.
57	213.	1.	114.	7.	5.	1740.	233.	18.	34.	134.
58	1.	31.	12.	1.	82.	18.	3.	86.	315.	30.
59	5.	25.	11.	14.	6.	2.	0.	25.	12808.	7.
60	1.	4.	5.	5.	0.	44.	2.	0.	4.	1957.
61	0.	0.	4.	1.	0.	0.	0.	0.	1.	1.
62	2.	50.	19.	84.	2.	15.	5.	4.	224.	185.
63	1.	1.	2.	1.	0.	5.	2.	1.	9.	36.
64	2.	9.	5.	37.	1.	6.	4.	2.	5.	5.
65	37.	51.	97.	70.	55.	121.	67.	33.	675.	152.
66	23.	15.	31.	15.	11.	75.	28.	7.	68.	101.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	13.	19.	49.	29.	21.	49.	38.	15.	165.	80.
69	81.	142.	198.	161.	123.	374.	184.	86.	925.	272.
70	22.	13.	42.	17.	9.	43.	23.	8.	119.	48.
71	46.	22.	53.	25.	24.	115.	47.	13.	78.	60.
72	7.	4.	13.	6.	5.	21.	13.	4.	30.	53.
73	66.	63.	99.	206.	64.	306.	105.	31.	481.	286.
74	3.	4.	7.	3.	3.	16.	6.	3.	378.	19.
75	1.	0.	1.	1.	1.	2.	1.	0.	2.	3.
76	3.	2.	6.	2.	2.	14.	5.	1.	9.	17.
77	5.	4.	7.	8.	3.	21.	7.	2.	39.	18.
78	0.	0.	1.	1.	0.	1.	1.	0.	4.	2.
79	1874.	1188.	2967.	1457.	1292.	5857.	2297.	996.	11847.	6002.
80	3390.	3028.	5761.	3861.	2780.	11303.	4156.	1982.	38801.	12305.

MATRIX A: BEA PURE FLOW

COLUMN / ROW	61	62	63	64	65	66	67	68	69	70
1	0.	0.	0.	2.	8.	0.	0.	1.	158.	2.
2	1.	4.	0.	12.	12.	1.	0.	3.	79.	6.
3	0.	0.	0.	4.	0.	0.	0.	0.	12.	0.
4	0.	0.	0.	0.	3.	0.	0.	0.	168.	0.
5	1.	0.	0.	0.	0.	0.	0.	3.	3.	0.
6	0.	0.	0.	0.	0.	0.	0.	1.	4.	0.
7	2.	0.	3.	2.	20.	0.	0.	682.	16.	1.
8	0.	0.	0.	0.	26.	0.	0.	1835.	31.	0.
9	0.	0.	0.	2.	0.	0.	0.	0.	12.	0.
10	0.	0.	0.	0.	1.	0.	0.	1.	3.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	7.	7.	4.	15.	1322.	370.	0.	1585.	474.	123.
13	0.	1.	0.	0.	0.	0.	0.	0.	2.	0.
14	10.	29.	7.	23.	179.	25.	0.	33.	470.	117.
15	1.	1.	1.	1.	4.	2.	0.	3.	27.	9.
16	2.	48.	2.	95.	0.	0.	0.	1.	51.	0.
17	33.	3.	0.	48.	17.	0.	0.	0.	23.	0.
18	5.	6.	2.	14.	15.	4.	0.	7.	30.	0.
19	16.	0.	0.	1.	0.	0.	0.	1.	15.	0.
20	140.	6.	1.	141.	3.	0.	0.	2.	49.	0.
21	0.	2.	0.	3.	0.	0.	0.	0.	48.	0.
22	27.	4.	0.	16.	0.	0.	0.	0.	2.	0.
23	5.	0.	0.	0.	0.	0.	0.	0.	1.	0.
24	12.	15.	51.	130.	26.	19.	0.	33.	850.	302.
25	2.	23.	15.	114.	10.	0.	0.	1.	593.	0.
26	3.	6.	2.	13.	84.	32.	0.	24.	290.	613.
27	5.	20.	145.	53.	54.	2.	0.	87.	104.	5.
28	13.	14.	10.	176.	0.	0.	0.	1.	71.	0.
29	1.	2.	0.	3.	5.	1.	0.	3.	64.	3.
30	22.	5.	0.	50.	5.	0.	0.	0.	10.	0.
31	12.	9.	4.	21.	1543.	82.	0.	252.	1305.	82.
32	61.	85.	34.	240.	197.	15.	0.	10.	257.	10.
33	0.	1.	0.	17.	0.	0.	0.	0.	4.	0.
34	0.	2.	4.	15.	1.	0.	0.	1.	11.	2.
35	18.	16.	30.	30.	3.	0.	0.	0.	50.	0.
36	19.	10.	6.	20.	11.	0.	0.	11.	46.	0.
37	559.	118.	30.	199.	225.	0.	0.	19.	122.	1.
38	120.	151.	74.	223.	20.	6.	0.	13.	72.	0.
39	0.	10.	0.	1.	0.	0.	0.	0.	23.	0.
40	168.	1.	0.	1.	0.	0.	0.	0.	6.	0.
41	29.	68.	11.	66.	7.	0.	0.	1.	48.	0.
42	112.	70.	17.	100.	102.	0.	0.	2.	80.	2.
43	112.	1.	0.	1.	55.	0.	0.	0.	5.	0.
44	1.	0.	0.	0.	1.	0.	0.	0.	1.	0.
45	7.	0.	0.	0.	0.	0.	0.	0.	3.	0.
46	2.	1.	0.	1.	1.	0.	0.	0.	2.	0.
47	22.	43.	1.	2.	20.	0.	0.	0.	21.	0.
48	0.	0.	0.	0.	0.	0.	0.	0.	6.	0.
49	170.	15.	1.	4.	13.	0.	0.	1.	20.	0.
50	25.	3.	2.	1.	10.	1.	0.	1.	43.	0.
51	1.	1.	0.	0.	0.	0.	0.	0.	10.	2.
52	9.	2.	1.	2.	1.	0.	0.	0.	5.	0.

MATRIX : BEA PURE FLOW

COLUMN / ROW	61	62	63	64	65	66	67	68	69	70
53	116.	60.	14.	29.	28.	0.	0.	2.	21.	0.
54	38.	0.	0.	1.	1.	0.	0.	1.	7.	2.
55	12.	22.	6.	12.	16.	0.	0.	34.	46.	0.
56	3.	17.	2.	2.	2.	165.	0.	1.	16.	3.
57	1.	91.	7.	19.	34.	0.	0.	0.	15.	0.
58	5.	3.	1.	1.	83.	3.	0.	3.	55.	2.
59	42.	12.	0.	2.	110.	4.	0.	6.	77.	2.
60	4.	10.	2.	3.	203.	0.	0.	0.	20.	0.
61	358.	1.	0.	2.	254.	0.	0.	3.	2.	0.
62	4.	251.	3.	4.	3.	0.	0.	0.	13.	1.
63	1.	13.	93.	6.	6.	4.	0.	3.	25.	41.
64	5.	13.	1.	471.	12.	8.	0.	6.	107.	81.
65	92.	56.	35.	125.	3233.	54.	1.	712.	1510.	228.
66	14.	32.	15.	35.	372.	95.	3.	98.	1274.	822.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	28.	22.	11.	38.	340.	140.	1.	5880.	2127.	584.
69	150.	149.	84.	305.	1055.	124.	1.	201.	2325.	404.
70	22.	25.	12.	38.	664.	109.	1.	273.	1907.	5877.
71	31.	42.	27.	90.	896.	242.	2.	227.	6411.	1576.
72	8.	12.	6.	14.	37.	16.	0.	17.	418.	57.
73	63.	170.	77.	222.	722.	225.	3.	633.	5761.	2444.
74	4.	5.	2.	7.	606.	100.	0.	53.	971.	75.
75	1.	1.	1.	1.	4.	4.	19.	3.	111.	10.
76	2.	4.	2.	5.	48.	12.	0.	13.	129.	350.
77	5.	8.	4.	16.	77.	62.	0.	85.	534.	608.
78	1.	1.	0.	1.	53.	7.	0.	9.	81.	12.
79	1805.	1860.	1445.	3118.	26010.	11005.	41.	16645.	89822.	18196.
80	4569.	3687.	2311.	6431.	38874.	12942.	74.	29529.	119554.	32660.

MATRIX : BEA PURE FLOW

COLUMN / ROW	71	72	73	74	75	76	77	78	79
1	299.	1.	5.	0.	18.	9.	0.	0.	22502.
2	375.	3.	15.	1.	3.	44.	1.	0.	17691.
3	3.	0.	1.	0.	0.	1.	0.	0.	1411.
4	87.	0.	0.	0.	0.	0.	0.	0.	1755.
5	2.	0.	0.	0.	0.	0.	0.	0.	1343.
6	2.	0.	0.	0.	0.	0.	0.	0.	1239.
7	13.	1.	1.	2.	0.	11.	52.	14.	2099.
8	211.	0.	0.	1.	0.	0.	0.	7.	11616.
9	10.	1.	0.	0.	0.	0.	0.	0.	1910.
10	4.	0.	0.	0.	-0.	0.	-0.	0.	391.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	7392.	146.	61.	50.	78.	668.	32.	221.	14870.
13	0.	1.	1.	0.	0.	1.	0.	0.	202.
14	194.	58.	285.	13.	52.	448.	12.	0.	20062.
15	5.	5.	22.	1.	4.	12.	1.	0.	1930.
16	20.	43.	9.	0.	0.	0.	2.	0.	11293.
17	6.	6.	12.	0.	0.	0.	3.	0.	2261.
18	9.	62.	3.	6.	0.	3.	0.	0.	3718.
19	6.	85.	1.	6.	0.	16.	5.	0.	1380.
20	15.	0.	18.	0.	0.	0.	0.	0.	9926.
21	6.	0.	0.	0.	0.	0.	0.	0.	378.
22	0.	0.	1.	0.	0.	0.	0.	0.	658.
23	0.	0.	0.	0.	0.	0.	0.	0.	280.
24	63.	53.	1184.	5.	3.	77.	12.	4.	10755.
25	16.	24.	45.	0.	0.	2.	0.	0.	4391.
26	72.	23.	1122.	3.	52.	530.	15.	2.	4875.
27	321.	58.	269.	7.	60.	48.	2.	13.	12714.
28	10.	0.	22.	0.	0.	0.	1.	0.	5059.
29	18.	246.	126.	0.	1.	601.	4.	0.	2105.
30	3.	7.	23.	74.	0.	0.	0.	0.	2216.
31	169.	141.	141.	120.	17.	146.	13.	9.	10086.
32	77.	57.	62.	232.	2.	44.	7.	1.	6672.
33	2.	11.	1.	0.	0.	0.	0.	0.	910.
34	3.	146.	7.	0.	6.	2.	1.	0.	337.
35	6.	0.	2.	73.	0.	4.	0.	0.	2426.
36	13.	60.	12.	108.	0.	3.	1.	3.	8543.
37	48.	0.	12.	0.	0.	0.	0.	2.	22442.
38	23.	5.	18.	0.	0.	0.	0.	0.	12749.
39	9.	0.	0.	0.	0.	0.	0.	0.	2290.
40	30.	0.	0.	0.	0.	0.	0.	0.	7348.
41	10.	0.	6.	121.	0.	2.	1.	0.	3991.
42	19.	52.	28.	82.	0.	3.	0.	0.	7039.
43	6.	0.	97.	33.	0.	0.	0.	0.	1082.
44	16.	0.	84.	0.	0.	0.	0.	0.	469.
45	2.	0.	14.	0.	0.	0.	0.	0.	768.
46	1.	0.	1.	0.	0.	0.	0.	0.	593.
47	7.	0.	20.	1.	0.	0.	0.	0.	2427.
48	6.	0.	14.	0.	0.	0.	0.	0.	640.
49	10.	0.	1.	0.	0.	0.	0.	0.	2691.
50	5.	2.	2.	108.	0.	1.	0.	0.	1954.
51	10.	0.	105.	0.	0.	1.	0.	0.	769.
52	4.	0.	100.	0.	0.	0.	0.	0.	1200.

MATRIX .: BEA PURE FLOW

COLUMN / ROW	71	72	73	74	75	76	77	78	79
53	14.	31.	118.	16.	0.	0.	0.	0.	3023.
54	3.	143.	7.	0.	1.	3.	1.	0.	581.
55	4.	8.	3.	13.	0.	1.	0.	3.	2127.
56	4.	1.	24.	0.	1.	4.	0.	0.	1959.
57	13.	394.	21.	0.	0.	3.	0.	0.	3268.
58	7.	5.	28.	191.	0.	4.	0.	0.	1189.
59	24.	5.	5.	838.	1.	5.	6.	1.	14444.
60	4.	0.	1.	0.	0.	1.	0.	0.	3072.
61	4.	8.	15.	0.	0.	0.	0.	1.	712.
62	4.	3.	9.	0.	0.	236.	0.	0.	1660.
63	15.	129.	231.	0.	109.	72.	1.	0.	956.
64	22.	316.	158.	1.	36.	69.	1.	1.	2193.
65	273.	184.	583.	104.	98.	343.	520.	15.	23503.
66	170.	125.	557.	70.	52.	402.	7.	5.	6187.
67	0.	0.	13.	0.	0.	17.	0.	0.	30.
68	292.	218.	512.	85.	82.	948.	50.	119.	17015.
69	480.	431.	881.	1266.	139.	620.	33.	7.	30974.
70	1878.	214.	283.	166.	101.	192.	11.	17.	15438.
71	3113.	838.	1774.	301.	699.	2690.	106.	8.	27730.
72	30.	412.	155.	14.	32.	219.	8.	1.	2361.
73	1310.	402.	1668.	120.	333.	661.	83.	42.	29163.
74	77.	123.	192.	37.	18.	151.	12.	2.	3957.
75	31.	6.	627.	1.	1439.	42.	1.	0.	2372.
76	42.	43.	72.	6.	19.	314.	1.	1.	1594.
77	326.	41.	739.	6.	11.	249.	2.	1.	3375.
78	6.	9.	18.	5.	2.	23.	2.	0.	367.
79	66086.	9577.	22629.	6483.	3985.	23156.	3515.	720.	547872.
80	83873.	14964.	35274.	10770.	7456.	33100.	4530.	1225.	1015579.

MATRIX 4: UN PURE FLOW

COLUMN	1	2	3	4	5	6	7	8	9	10
ROW										
1	4555.	1710.	0.	279.	0.	0.	0.	0.	0.	0.
2	7821.	759.	0.	0.	0.	0.	0.	1.	0.	-0.
3	-7.	-18.	40.	0.	0.	-0.	0.	0.	0.	-0.
4	439.	1047.	86.	-0.	-0.	-0.	-0.	-0.	-0.	0.
5	0.	0.	0.	0.	56.	-1.	0.	0.	-0.	-1.
6	0.	0.	0.	0.	4.	265.	-0.	0.	-0.	-2.
7	5.	1.	0.	0.	5.	1.	410.	-3.	1.	-0.
8	0.	-0.	0.	0.	-0.	-0.	-0.	95.	-6.	-0.
9	1.	85.	0.	0.	5.	-0.	-0.	-1.	14.	4.
10	-0.	35.	0.	0.	-0.	-0.	0.	0.	-0.	27.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	107.	216.	0.	-1.	0.	7.	13.	362.	10.	1.
13	0.	0.	0.	0.	0.	0.	0.	0.	0.	-0.
14	3391.	-31.	56.	56.	1.	2.	3.	17.	3.	-2.
15	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.
16	-0.	9.	0.	0.	0.	0.	0.	0.	-0.	0.
17	4.	6.	71.	59.	0.	0.	0.	2.	0.	-0.
18	-1.	-0.	0.	0.	0.	0.	0.	-0.	-0.	-0.
19	16.	43.	1.	0.	0.	-0.	-0.	0.	-0.	-0.
20	2.	-51.	0.	0.	2.	10.	17.	0.	-0.	-0.
21	-1.	90.	0.	21.	-0.	-0.	-0.	-0.	-0.	-0.
22	0.	0.	0.	0.	0.	0.	0.	-0.	-0.	0.
23	0.	0.	0.	0.	0.	0.	0.	-0.	0.	0.
24	0.	-1.	1.	0.	0.	0.	1.	1.	5.	0.
25	-13.	-38.	0.	126.	-0.	-0.	-0.	-1.	-0.	-1.
26	-1.	7.	1.	0.	0.	0.	1.	3.	1.	0.
27	52.	1418.	2.	1.	22.	55.	38.	94.	35.	-23.
28	-1.	-0.	0.	0.	0.	0.	-0.	0.	-0.	-1.
29	81.	-0.	0.	0.	0.	0.	0.	-1.	-0.	0.
30	-0.	-1.	5.	0.	0.	0.	0.	5.	0.	-0.
31	164.	945.	40.	5.	11.	7.	23.	30.	38.	4.
32	25.	112.	1.	0.	7.	10.	32.	16.	75.	2.
33	-0.	-0.	0.	0.	0.	-0.	-0.	-0.	-0.	-0.
34	7.	-1.	0.	4.	0.	0.	0.	0.	0.	0.
35	-5.	-1.	0.	0.	0.	0.	0.	0.	0.	-0.
36	1.	38.	1.	0.	4.	2.	3.	40.	-3.	-2.
37	0.	-1.	0.	0.	21.	27.	39.	30.	29.	12.
38	1.	1.	0.	0.	1.	-0.	0.	-1.	2.	-0.
39	-14.	9.	25.	0.	0.	-0.	-0.	-3.	-0.	-2.
40	-0.	-1.	0.	-0.	0.	2.	-0.	18.	2.	1.
41	22.	-0.	0.	0.	-0.	-0.	-0.	0.	-0.	0.
42	17.	-33.	17.	191.	1.	4.	12.	13.	4.	-1.
43	0.	-0.	0.	0.	8.	11.	36.	16.	40.	5.
44	5.	229.	0.	0.	-0.	-0.	-0.	-0.	-0.	-0.
45	0.	0.	0.	0.	24.	29.	85.	25.	51.	16.
46	-0.	-0.	0.	0.	0.	3.	1.	-0.	17.	4.
47	0.	-0.	0.	0.	1.	1.	5.	0.	-0.	-0.
48	-0.	-1.	0.	0.	0.	-0.	-0.	0.	0.	-2.
49	-0.	-0.	1.	0.	0.	1.	2.	25.	25.	2.
50	3.	7.	0.	0.	0.	32.	11.	0.	8.	2.
51	-0.	-0.	0.	0.	0.	-0.	0.	0.	0.	0.
52	0.	0.	0.	0.	-0.	-0.	-0.	-0.	-0.	-0.

MATRIX : UN PURE FLOW

COLUMN	1	2	3	4	5	6	7	8	9	10
ROW										
53	0.	-0.	0.	0.	0.	1.	7.	82.	8.	5.
54	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
55	-2.	-1.	41.	0.	0.	1.	11.	0.	1.	1.
56	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.
57	0.	-0.	0.	0.	-0.	0.	0.	15.	0.	0.
58	6.	25.	2.	0.	0.	0.	1.	1.	1.	0.
59	6.	14.	0.	0.	2.	2.	8.	3.	16.	1.
60	-0.	-1.	0.	1.	0.	0.	0.	-0.	0.	0.
61	-2.	2.	24.	0.	0.	2.	9.	-0.	0.	0.
62	-0.	-0.	1.	0.	0.	1.	0.	5.	0.	-0.
63	-0.	-0.	0.	0.	0.	0.	0.	0.	0.	-0.
64	2.	2.	0.	0.	0.	1.	0.	1.	0.	-0.
65	576.	284.	59.	47.	129.	30.	51.	286.	36.	32.
66	49.	79.	0.	-0.	1.	2.	3.	8.	0.	2.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	88.	199.	0.	1.	26.	40.	65.	80.	64.	28.
69	830.	804.	66.	63.	22.	28.	58.	140.	57.	7.
70	130.	276.	4.	8.	7.	25.	28.	87.	30.	4.
71	250.	1941.	0.	59.	112.	40.	72.	2239.	47.	10.
72	-1.	2.	3.	3.	0.	1.	1.	8.	1.	-0.
73	98.	809.	1.	-0.	33.	13.	28.	95.	21.	2.
74	73.	157.	8.	1.	1.	2.	8.	42.	20.	1.
75	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.
76	180.	12.	0.	0.	1.	1.	2.	5.	0.	2.
77	-0.	-2.	0.	0.	1.	1.	2.	4.	1.	1.
78	0.	1.	0.	0.	1.	1.	1.	3.	2.	1.
79	5733.	13597.	1191.	838.	958.	825.	1532.	7748.	1279.	343.
80	24694.	24788.	1751.	1765.	1470.	1482.	2621.	11643.	1937.	480.

MATRIX : : UN PURE FLOW

COLUMN	11	12	13	14	15	16	17	18	19	20
ROW										
1	2.	1.	0.	15638.	0.	39.	193.	-0.	-2.	0.
2	328.	2.	1.	6085.	1125.	1349.	19.	-3.	-6.	0.
3	0.	0.	0.	309.	0.	-0.	-0.	116.	-0.	943.
4	3.	0.	-0.	-1.	-0.	-0.	-0.	-0.	-0.	-0.
5	0.	0.	-0.	-1.	0.	-0.	-0.	0.	0.	-0.
6	0.	0.	0.	-1.	0.	0.	-0.	0.	0.	-0.
7	0.	0.	1.	39.	2.	13.	1.	2.	0.	2.
8	0.	0.	-0.	-0.	-0.	-0.	-0.	-0.	0.	-0.
9	478.	259.	-0.	7.	-0.	0.	-0.	-0.	-0.	-0.
10	0.	0.	-0.	3.	0.	0.	-0.	0.	-0.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	17.	7.	7.	138.	7.	27.	9.	11.	4.	33.
13	5.	0.	220.	0.	0.	0.	0.	0.	0.	0.
14	122.	44.	16.	13156.	11.	40.	25.	24.	5.	9.
15	8.	3.	1.	5.	1764.	1.	0.	2.	0.	1.
16	31.	0.	-0.	4.	-0.	4165.	526.	4873.	872.	-1.
17	124.	3.	-0.	2.	-0.	342.	258.	50.	370.	-1.
18	29.	13.	5.	47.	0.	-9.	29.	3212.	15.	14.
19	7.	0.	-0.	97.	-0.	-68.	74.	265.	350.	-0.
20	3554.	724.	21.	8.	1.	-2.	-2.	-0.	8.	3250.
21	0.	0.	7.	88.	5.	0.	-0.	-0.	-0.	-0.
22	342.	0.	-2.	-0.	-0.	0.	-0.	-0.	-0.	-0.
23	184.	4.	-1.	-0.	-0.	0.	-0.	0.	-0.	-0.
24	212.	73.	4.	919.	35.	54.	42.	13.	-3.	9.
25	4.	0.	8.	1150.	91.	62.	29.	126.	34.	15.
26	12.	5.	8.	482.	58.	5.	1.	11.	2.	4.
27	201.	54.	19.	173.	2.	350.	10.	12.	-2.	94.
28	1.	0.	0.	103.	78.	1084.	546.	344.	25.	16.
29	5.	1.	1.	156.	6.	35.	8.	11.	0.	0.
30	308.	859.	-1.	-0.	0.	7.	-0.	-0.	-0.	52.
31	1119.	540.	16.	204.	2.	21.	8.	16.	2.	46.
32	487.	139.	131.	254.	0.	5.	45.	21.	123.	6.
33	0.	0.	0.	2.	0.	1.	0.	37.	-0.	1.
34	2.	1.	0.	1.	0.	0.	0.	-0.	0.	0.
35	81.	93.	-1.	787.	0.	42.	-1.	-0.	-0.	13.
36	5813.	410.	-1.	1.	0.	-0.	-0.	0.	-0.	49.
37	2125.	317.	162.	-2.	0.	-0.	-1.	-0.	2.	38.
38	1244.	209.	221.	-1.	-0.	-1.	-0.	-0.	3.	5.
39	0.	0.	-0.	1615.	9.	-0.	-0.	-0.	-0.	-0.
40	6159.	569.	-1.	-0.	-0.	-0.	0.	-0.	-0.	-0.
41	112.	19.	-3.	203.	-0.	-0.	-0.	-0.	-0.	7.
42	975.	269.	37.	217.	42.	4.	1.	17.	3.	167.
43	26.	0.	-2.	-0.	-0.	0.	0.	0.	-0.	-0.
44	2.	1.	-0.	0.	0.	0.	0.	0.	-0.	-0.
45	238.	71.	0.	0.	-0.	-0.	-0.	0.	0.	-0.
46	257.	96.	1.	7.	0.	3.	0.	2.	0.	4.
47	11.	0.	10.	-0.	-0.	0.	-0.	-0.	-0.	-0.
48	0.	0.	-1.	34.	0.	76.	11.	7.	-1.	33.
49	210.	43.	13.	4.	0.	1.	0.	1.	-0.	1.
50	12.	1.	3.	4.	0.	0.	-0.	0.	0.	1.
51	0.	0.	-0.	0.	0.	0.	0.	0.	0.	0.
52	404.	116.	-0.	-0.	0.	0.	0.	0.	-0.	-0.

MATRIX #: UN PURE FLOW

COLUMN	11	12	13	14	15	16	17	18	19	20
ROW										
53	337.	56.	26.	-1.	-0.	0.	-0.	-0.	-0.	-0.
54	185.	100.	0.	1.	0.	0.	0.	0.	0.	0.
55	1123.	183.	-2.	0.	0.	0.	0.	0.	-0.	0.
56	81.	21.	302.	2.	0.	0.	0.	1.	0.	0.
57	1.	1.	91.	-0.	-0.	0.	-0.	-0.	-0.	-0.
58	37.	10.	24.	6.	0.	0.	0.	0.	0.	1.
59	36.	14.	-7.	15.	0.	0.	0.	1.	-0.	2.
60	0.	0.	754.	0.	-0.	-0.	-0.	-0.	0.	0.
61	4.	0.	0.	0.	-0.	0.	0.	0.	-0.	-0.
62	208.	70.	33.	8.	1.	3.	1.	8.	1.	3.
63	6.	1.	22.	6.	1.	2.	0.	4.	1.	1.
64	94.	79.	3.	12.	1.	0.	42.	350.	4.	2.
65	2290.	553.	56.	2592.	47.	225.	84.	144.	32.	366.
66	180.	79.	67.	185.	3.	23.	9.	75.	14.	28.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	205.	90.	32.	485.	8.	129.	22.	62.	13.	82.
69	5474.	1711.	115.	2631.	67.	415.	213.	642.	177.	272.
70	401.	161.	33.	372.	15.	45.	14.	86.	20.	82.
71	307.	134.	35.	329.	13.	54.	21.	208.	30.	76.
72	46.	20.	20.	209.	16.	8.	4.	15.	6.	4.
73	2959.	281.	135.	2182.	312.	115.	36.	230.	32.	133.
74	235.	101.	11.	178.	1.	5.	2.	11.	2.	29.
75	7.	3.	1.	5.	1.	1.	0.	2.	0.	1.
76	59.	26.	10.	35.	1.	3.	1.	10.	2.	4.
77	18.	8.	13.	48.	13.	9.	4.	46.	6.	6.
78	28.	10.	1.	25.	0.	2.	0.	1.	0.	2.
79	25940.	11137.	3219.	21979.	3672.	3613.	1173.	6710.	873.	4532.
80	65519.	19794.	5895.	73241.	7409.	12298.	3458.	17777.	3014.	10437.

MATRIX F.: UN PURE FLOW

COLUMN	21	22	23	24	25	26	27	28	29	30
ROW										
1	-0.	-0.	0.	0.	0.	-0.	-10.	-1.	-10.	0.
2	0.	0.	0.	1.	0.	0.	17.	-0.	5.	1.
3	-2.	-2.	-0.	-1.	-0.	-0.	33.	-1.	1.	-0.
4	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.
5	0.	0.	0.	-0.	0.	0.	97.	-2.	-1.	-0.
6	0.	-0.	0.	-0.	0.	-0.	93.	-2.	-1.	-0.
7	0.	1.	1.	78.	0.	0.	75.	26.	3.	-0.
8	0.	-0.	0.	-1.	-0.	0.	10.	-0.	-7.	-10.
9	-0.	-0.	-0.	57.	0.	-0.	36.	-1.	3.	5.
10	-0.	-0.	-0.	11.	-0.	-0.	325.	-7.	-3.	-1.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	0.	4.	3.	43.	12.	26.	81.	22.	19.	4.
13	0.	0.	-0.	0.	0.	0.	0.	0.	0.	0.
14	1.	8.	3.	141.	4.	24.	182.	23.	275.	116.
15	0.	1.	0.	1.	0.	1.	3.	1.	2.	1.
16	-0.	218.	0.	64.	-1.	1.	3.	-8.	0.	0.
17	-0.	106.	33.	13.	-1.	23.	-0.	-12.	-0.	0.
18	1.	7.	3.	9.	5.	-0.	8.	3.	3.	1.
19	0.	0.	-0.	-3.	-0.	-0.	17.	-1.	-0.	-0.
20	132.	558.	151.	802.	-1.	22.	45.	1.	-2.	-0.
21	15.	0.	1.	0.	0.	-0.	4.	2.	2.	1.
22	-0.	74.	4.	-0.	-0.	-0.	-0.	-0.	-0.	-0.
23	-0.	-1.	46.	0.	-0.	-0.	-0.	0.	-0.	0.
24	-1.	4.	-4.	2287.	1910.	2549.	141.	232.	75.	-0.
25	1.	52.	31.	346.	139.	57.	88.	39.	225.	19.
26	0.	3.	-2.	18.	4.	1775.	4.	2.	38.	2.
27	-0.	6.	0.	437.	80.	339.	3209.	1968.	683.	457.
28	-0.	6.	-0.	165.	32.	32.	35.	65.	-3.	220.
29	0.	1.	0.	14.	1.	-31.	-10.	18.	552.	10.
30	-0.	92.	38.	-1.	-0.	21.	20.	-1.	5.	0.
31	1.	6.	3.	106.	35.	9.	125.	21.	34.	104.
32	-0.	239.	93.	146.	3.	65.	-9.	-8.	287.	0.
33	0.	4.	2.	2.	0.	0.	4.	1.	0.	0.
34	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
35	-0.	25.	43.	-1.	-0.	-0.	4.	-1.	173.	-0.
36	-0.	-1.	16.	14.	-0.	-3.	31.	-1.	10.	5.
37	37.	87.	186.	-8.	-1.	0.	119.	-4.	-4.	2.
38	-0.	30.	17.	-6.	13.	4.	177.	-2.	-5.	22.
39	-0.	-0.	-0.	-1.	-0.	-0.	168.	11.	188.	154.
40	-0.	-0.	-0.	-0.	-0.	0.	-0.	-0.	-0.	-0.
41	1.	6.	21.	-1.	-0.	-1.	-1.	-0.	32.	-0.
42	2.	263.	70.	153.	15.	13.	106.	-2.	59.	1.
43	0.	-0.	0.	0.	0.	-28.	0.	-0.	0.	0.
44	0.	-0.	0.	0.	0.	-24.	0.	-0.	-0.	0.
45	0.	-0.	0.	0.	0.	-4.	-0.	0.	0.	-0.
46	0.	1.	0.	6.	1.	2.	8.	1.	1.	0.
47	-0.	-0.	-0.	-1.	-0.	-5.	-1.	-0.	-0.	-0.
48	2.	-0.	-0.	29.	8.	33.	173.	-4.	-3.	-1.
49	-0.	-0.	0.	26.	0.	0.	8.	1.	0.	-0.
50	0.	0.	3.	0.	0.	0.	-1.	-0.	1.	0.
51	0.	0.	-2.	-1.	0.	-18.	0.	0.	0.	0.
52	-0.	-0.	0.	0.	0.	-28.	0.	0.	-0.	-0.

MATRIX : UN PURE FLOW

COLUMN	21	22	23	24	25	26	27	28	29	30
ROW										
53	-0.	-1.	-0.	-0.	0.	-32.	17.	-0.	-1.	-0.
54	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.
55	-0.	0.	2.	-0.	0.	-0.	-0.	-0.	3.	-0.
56	0.	0.	-0.	0.	0.	-1.	0.	0.	1.	0.
57	-0.	-0.	-1.	-1.	-0.	-0.	-0.	-0.	-0.	-0.
58	-0.	0.	0.	0.	0.	-7.	0.	0.	0.	0.
59	0.	0.	0.	1.	0.	1.	1.	0.	1.	0.
60	0.	0.	-0.	0.	0.	-0.	-4.	0.	0.	0.
61	0.	-0.	0.	0.	0.	-4.	0.	-0.	0.	0.
62	0.	1.	0.	1.	1.	2.	1.	1.	3.	0.
63	0.	1.	0.	0.	0.	88.	2.	-0.	1.	0.
64	0.	2.	1.	2.	1.	-8.	3.	1.	1.	1.
65	23.	102.	42.	521.	155.	177.	553.	138.	183.	68.
66	1.	19.	12.	37.	21.	88.	66.	24.	39.	13.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	4.	22.	14.	275.	28.	-42.	626.	64.	24.	8.
69	12.	175.	73.	427.	100.	198.	536.	182.	314.	124.
70	2.	34.	24.	72.	16.	67.	99.	34.	54.	15.
71	4.	86.	28.	71.	45.	525.	93.	43.	77.	19.
72	1.	6.	2.	25.	11.	33.	26.	8.	50.	15.
73	4.	82.	33.	199.	82.	128.	334.	168.	1355.	64.
74	1.	5.	3.	9.	5.	-15.	15.	4.	4.	2.
75	0.	1.	0.	1.	0.	1.	3.	1.	2.	1.
76	0.	3.	2.	5.	3.	15.	8.	3.	5.	2.
77	0.	5.	3.	10.	4.	-3.	13.	3.	18.	4.
78	0.	0.	0.	5.	0.	1.	8.	2.	1.	0.
79	145.	1582.	821.	6096.	1857.	3035.	7786.	2639.	3685.	867.
80	385.	3925.	1820.	12704.	4590.	9100.	15601.	5693.	8457.	2315.

MATRIX M: UN PURE FLOW

COLUMN / ROW	31	32	33	34	35	36	37	38	39	40
1	1.	-2.	58.	-0.	0.	0.	0.	0.	0.	0.
2	-1.	1.	0.	0.	0.	8.	1.	1.	0.	1.
3	-2.	-0.	0.	-0.	-0.	-0.	-0.	-0.	0.	-1.
4	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.
5	-6.	-0.	-0.	-0.	-0.	17.	1191.	12.	-0.	-0.
6	-6.	-0.	-0.	0.	0.	0.	-6.	915.	0.	-0.
7	4.	9.	2.	0.	3.	84.	476.	12.	0.	1.
8	9665.	-0.	-0.	0.	0.	-11.	-4.	-3.	0.	-2.
9	64.	6.	-0.	-0.	37.	762.	71.	18.	-0.	0.
10	-20.	-0.	0.	-0.	1.	10.	9.	-1.	0.	-0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	308.	25.	1.	4.	12.	40.	170.	42.	2.	13.
13	0.	0.	0.	0.	0.	0.	-0.	-0.	0.	-0.
14	22.	17.	243.	6.	5.	21.	19.	16.	3.	22.
15	1.	2.	0.	0.	0.	1.	2.	1.	0.	2.
16	-0.	185.	-0.	94.	-1.	11.	0.	12.	0.	-1.
17	0.	369.	-0.	108.	-0.	13.	-4.	12.	-0.	1.
18	3.	10.	-0.	15.	4.	10.	19.	7.	2.	9.
19	-1.	-2.	-0.	29.	-0.	20.	-0.	-0.	-0.	-0.
20	1.	19.	1.	38.	54.	24.	26.	20.	2.	11.
21	-0.	3.	0.	3.	12.	2.	2.	2.	0.	9.
22	0.	-0.	-0.	-0.	-0.	0.	-0.	-1.	-0.	-0.
23	0.	-0.	0.	0.	-0.	-0.	-0.	-0.	0.	-0.
24	93.	-2.	0.	16.	-1.	144.	7.	16.	-14.	15.
25	55.	158.	2.	55.	136.	38.	6.	7.	43.	41.
26	5.	6.	0.	3.	2.	5.	10.	4.	91.	6.
27	320.	330.	32.	-0.	132.	145.	382.	130.	8.	37.
28	-4.	1700.	-0.	5.	-0.	58.	-2.	129.	2.	-1.
29	54.	-1.	40.	7.	0.	25.	2.	1.	2.	6.
30	-1.	9.	-0.	-0.	5.	-0.	-8.	-2.	70.	96.
31	1656.	17.	3.	3.	8.	74.	154.	81.	3.	24.
32	-1.	471.	0.	308.	63.	47.	3.	8.	7.	-7.
33	2.	-3.	181.	615.	0.	3.	5.	2.	0.	0.
34	0.	-0.	-0.	103.	0.	0.	-0.	-0.	0.	0.
35	-1.	24.	-0.	1.	193.	-1.	-4.	-2.	-0.	77.
36	27.	1.	1.	-0.	70.	1094.	26.	32.	-0.	11.
37	-9.	33.	-0.	6.	5.	98.	4825.	-42.	1014.	2124.
38	35.	7.	-0.	1.	14.	17.	362.	4985.	34.	660.
39	126.	0.	-0.	0.	-0.	-1.	-1.	-1.	1.	-0.
40	-0.	-1.	-0.	-0.	1.	10.	-7.	-2.	-0.	201.
41	-0.	7.	-0.	-0.	1.	-0.	125.	21.	18.	121.
42	-1.	47.	1.	30.	0.	99.	332.	36.	3.	311.
43	-0.	-0.	0.	0.	-0.	-1.	-3.	-0.	0.	-1.
44	-0.	-0.	0.	0.	0.	-0.	-1.	-0.	0.	-0.
45	-1.	-0.	-0.	0.	-0.	44.	-1.	-0.	0.	-0.
46	4.	2.	0.	1.	1.	12.	12.	4.	0.	1.
47	-0.	1.	-0.	-0.	3.	6.	-2.	61.	3.	30.
48	-11.	5.	-0.	-0.	-0.	-0.	18.	3.	-0.	-2.
49	1.	-3.	0.	-0.	0.	4.	110.	33.	0.	37.
50	0.	5.	0.	0.	0.	-1.	164.	96.	0.	-2.
51	0.	0.	0.	0.	-0.	-3.	-1.	-0.	0.	0.
52	-0.	-0.	0.	0.	-0.	-0.	14.	-1.	-0.	55.

MATRIX : UN PURE FLOW

COLUMN / ROW	31	32	33	34	35	36	37	38	39	40
53	-1.	-2.	0.	-0.	-1.	-2.	132.	14.	-0.	94.
54	0.	0.	0.	0.	0.	0.	0.	0.	0.	-0.
55	-0.	-1.	0.	-0.	-0.	14.	-2.	1.	0.	-2.
56	0.	-1.	0.	0.	0.	0.	0.	-4.	0.	-0.
57	0.	-1.	-0.	-0.	-0.	-1.	-1.	-9.	0.	-0.
58	0.	-0.	0.	0.	-0.	1.	-1.	-2.	0.	-2.
59	0.	-8.	0.	0.	0.	1.	-4.	-2.	0.	-6.
60	0.	-5.	0.	0.	-0.	-1.	-0.	-6.	0.	-2.
61	-0.	-0.	0.	0.	-0.	0.	-3.	0.	0.	-1.
62	1.	-1.	0.	2.	1.	2.	21.	2.	0.	53.
63	1.	1.	0.	1.	0.	1.	3.	1.	0.	3.
64	1.	8.	0.	55.	5.	16.	33.	9.	0.	2.
65	965.	203.	15.	43.	74.	561.	1175.	342.	62.	182.
66	20.	31.	2.	14.	10.	46.	98.	42.	3.	56.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	348.	105.	9.	13.	115.	306.	594.	322.	17.	62.
69	369.	304.	35.	113.	110.	240.	712.	415.	74.	292.
70	201.	47.	6.	22.	21.	73.	208.	68.	17.	54.
71	401.	69.	10.	27.	23.	49.	39.	49.	16.	108.
72	12.	21.	0.	4.	5.	13.	20.	8.	2.	40.
73	463.	227.	8.	85.	66.	187.	307.	132.	47.	144.
74	7.	6.	0.	2.	3.	26.	17.	6.	1.	10.
75	0.	2.	0.	0.	0.	1.	1.	1.	0.	2.
76	2.	6.	0.	2.	1.	6.	9.	4.	1.	7.
77	11.	10.	1.	12.	3.	8.	14.	7.	1.	9.
78	2.	2.	0.	0.	1.	2.	8.	3.	0.	1.
79	4998.	4735.	299.	1548.	1678.	4517.	11225.	5353.	820.	3362.
80	20186.	9212.	952.	3395.	2875.	8996.	23102.	13416.	2359.	8369.

MATRIX *: UN PURE FLOW

COLUMN / ROW	41	42	43	44	45	46	47	48	49	50
1	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
2	0.	1.	0.	0.	0.	0.	1.	0.	1.	0.
3	-1.	-1.	0.	0.	0.	0.	0.	-0.	-0.	0.
4	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.
5	-1.	-4.	-0.	-2.	-1.	-0.	-4.	-1.	-0.	-0.
6	-1.	-1.	-1.	0.	0.	0.	-0.	-0.	-0.	-1.
7	1.	1.	2.	1.	2.	0.	-1.	0.	1.	-0.
8	-0.	0.	-0.	-0.	0.	0.	0.	-0.	-0.	0.
9	-0.	2.	-0.	0.	-0.	-0.	-2.	0.	-0.	0.
10	-0.	0.	0.	-0.	-0.	-0.	-0.	-0.	-0.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	5.	12.	4.	2.	4.	2.	10.	-4.	8.	6.
13	-1.	0.	0.	0.	-0.	0.	-0.	0.	-0.	0.
14	8.	22.	4.	5.	8.	3.	14.	9.	12.	7.
15	1.	2.	0.	0.	1.	0.	1.	1.	1.	1.
16	-2.	-3.	-0.	-0.	-0.	2.	-0.	2.	-1.	2.
17	-3.	51.	-0.	-0.	-0.	-0.	-0.	1.	-1.	-0.
18	6.	11.	2.	2.	3.	1.	6.	4.	5.	3.
19	-0.	-0.	-1.	-0.	-0.	-0.	-0.	-0.	-1.	-0.
20	33.	45.	1.	6.	3.	1.	5.	15.	8.	2.
21	3.	5.	1.	1.	1.	-0.	1.	1.	2.	1.
22	-0.	-0.	-0.	-0.	0.	-0.	-0.	-0.	-1.	-0.
23	-0.	-1.	-0.	2.	-0.	-0.	-0.	-0.	-0.	-0.
24	12.	9.	1.	1.	2.	1.	3.	2.	4.	2.
25	53.	100.	9.	8.	5.	1.	11.	3.	13.	9.
26	1.	5.	2.	2.	3.	1.	4.	3.	4.	2.
27	28.	139.	4.	6.	6.	3.	11.	10.	11.	5.
28	15.	-5.	-0.	-1.	-0.	-0.	-1.	3.	-1.	-0.
29	4.	4.	1.	0.	1.	0.	2.	2.	1.	1.
30	27.	76.	-0.	15.	12.	5.	2.	1.	1.	-0.
31	18.	20.	11.	6.	9.	5.	21.	25.	32.	5.
32	52.	115.	2.	54.	83.	50.	17.	37.	14.	6.
33	0.	-0.	0.	15.	0.	0.	0.	4.	3.	0.
34	-0.	11.	0.	0.	0.	0.	0.	0.	0.	0.
35	-0.	7.	-1.	-0.	-1.	-1.	-0.	-1.	-3.	-0.
36	17.	80.	19.	8.	12.	1.	54.	7.	42.	21.
37	1016.	1169.	233.	389.	647.	178.	419.	313.	597.	187.
38	279.	639.	90.	14.	32.	22.	91.	75.	180.	82.
39	-0.	-1.	0.	0.	0.	0.	-0.	-0.	-0.	0.
40	-2.	-3.	2.	-3.	39.	8.	21.	69.	41.	-1.
41	106.	94.	61.	84.	46.	22.	53.	29.	27.	14.
42	45.	393.	23.	30.	76.	15.	22.	56.	101.	45.
43	-0.	-2.	228.	138.	124.	13.	-1.	25.	12.	-3.
44	-0.	-1.	-0.	154.	-1.	-0.	-0.	-0.	-0.	0.
45	-0.	-1.	-0.	-5.	183.	-2.	-1.	-0.	-2.	0.
46	1.	-1.	8.	-0.	-5.	129.	4.	-1.	-1.	0.
47	29.	76.	67.	36.	129.	23.	435.	69.	95.	76.
48	4.	-0.	0.	-1.	-3.	-1.	-4.	252.	-2.	-1.
49	-3.	-7.	75.	260.	237.	85.	194.	173.	458.	-1.
50	-1.	-3.	70.	85.	14.	34.	-4.	9.	-5.	241.
51	0.	0.	0.	-0.	0.	0.	-0.	-0.	-3.	0.
52	-1.	-3.	-0.	-1.	-0.	-1.	-1.	-1.	-4.	-0.

MATRIX : UN PURE FLOW

ROW \ COLUMN	41	42	43	44	45	46	47	48	49	50
53	-3.	25.	22.	2.	46.	65.	139.	109.	115.	1.
54	-1.	0.	0.	3.	0.	-0.	0.	0.	-0.	0.
55	1.	0.	-1.	11.	-0.	-0.	-0.	-1.	1.	-0.
56	-2.	-0.	-2.	0.	-0.	-0.	-1.	-0.	-3.	-1.
57	-1.	1.	-2.	-0.	-0.	-1.	-1.	-1.	-3.	-1.
58	-0.	-1.	44.	29.	3.	4.	-0.	-1.	-1.	12.
59	-12.	-2.	-20.	17.	-5.	-5.	0.	-0.	-14.	-9.
60	-6.	-3.	-8.	0.	-2.	-2.	-2.	-1.	-2.	-2.
61	-0.	-1.	-1.	-1.	-0.	-0.	-0.	-0.	0.	0.
62	-1.	-1.	6.	3.	-0.	-1.	-1.	5.	34.	0.
63	1.	1.	0.	1.	0.	0.	1.	1.	1.	0.
64	-2.	18.	1.	-0.	1.	0.	2.	1.	0.	1.
65	83.	148.	32.	59.	61.	28.	58.	49.	67.	33.
66	25.	38.	9.	10.	15.	9.	26.	18.	28.	10.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	44.	90.	12.	15.	26.	7.	39.	19.	40.	19.
69	110.	278.	79.	113.	133.	60.	155.	134.	160.	56.
70	36.	64.	7.	22.	40.	10.	35.	25.	25.	20.
71	52.	90.	1.	10.	18.	14.	42.	96.	31.	30.
72	7.	16.	4.	6.	6.	3.	12.	7.	10.	5.
73	75.	173.	39.	75.	52.	26.	91.	52.	89.	40.
74	3.	8.	2.	2.	3.	2.	5.	3.	5.	2.
75	1.	2.	0.	0.	1.	0.	1.	1.	1.	1.
76	3.	6.	2.	2.	3.	2.	5.	4.	5.	2.
77	5.	10.	3.	4.	4.	2.	7.	5.	8.	3.
78	1.	1.	1.	0.	1.	0.	0.	0.	1.	0.
79	2235.	4247.	958.	1041.	1581.	617.	2764.	1586.	2506.	1130.
80	4396.	8262.	2104.	2739.	3656.	1439.	4761.	3299.	4746.	2063.

MATRIX : UN PURE FLOW

COLUMN	51	52	53	54	55	56	57	58	59	60
ROW										
1	0.	0.	0.	0.	0.	1.	0.	0.	0.	1.
2	1.	0.	1.	0.	0.	1.	1.	0.	1.	2.
3	0.	-0.	0.	0.	0.	0.	-0.	0.	0.	0.
4	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.
5	0.	0.	-0.	-0.	5.	-0.	-0.	-0.	-4.	0.
6	0.	-0.	-0.	-0.	-2.	-1.	-0.	-4.	-5.	0.
7	1.	1.	1.	2.	0.	1.	0.	0.	14.	1.
8	0.	0.	-0.	0.	0.	-0.	0.	-0.	-0.	0.
9	0.	-1.	-1.	0.	-0.	-0.	0.	0.	1.	-0.
10	0.	-0.	-0.	0.	0.	-0.	-0.	-0.	-0.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	4.	6.	7.	1.	2.	8.	10.	0.	67.	19.
13	0.	-0.	0.	-0.	-2.	28.	-1.	0.	0.	-50.
14	11.	5.	19.	9.	8.	29.	19.	6.	28.	39.
15	1.	0.	2.	1.	1.	2.	2.	0.	2.	3.
16	-0.	-1.	2.	7.	-0.	-3.	-1.	2.	-14.	5.
17	1.	6.	4.	-2.	8.	-1.	-1.	-1.	130.	0.
18	3.	3.	6.	3.	3.	10.	7.	2.	16.	11.
19	-0.	-0.	-0.	-0.	-0.	0.	-1.	-1.	402.	-0.
20	0.	7.	5.	10.	1.	2.	-1.	0.	21.	-4.
21	1.	12.	3.	7.	1.	6.	2.	1.	6.	2.
22	-0.	-0.	-1.	-0.	-1.	203.	-1.	0.	-0.	-3.
23	-0.	-0.	-0.	0.	-0.	-1.	-0.	-0.	1.	42.
24	9.	4.	43.	3.	-0.	17.	62.	0.	11.	8.
25	3.	24.	15.	66.	58.	26.	28.	20.	7.	5.
26	0.	2.	15.	6.	1.	38.	5.	1.	10.	11.
27	5.	20.	39.	28.	15.	5.	84.	52.	35.	9.
28	2.	-1.	19.	20.	31.	41.	26.	10.	9.	11.
29	-1.	0.	1.	0.	1.	2.	1.	0.	3.	3.
30	1.	25.	20.	43.	17.	1.	4.	-0.	194.	14.
31	5.	8.	34.	4.	32.	23.	11.	2.	66.	45.
32	44.	81.	73.	257.	81.	86.	89.	101.	856.	37.
33	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.
34	0.	0.	-0.	4.	0.	0.	0.	0.	0.	0.
35	1.	3.	-2.	8.	109.	30.	155.	0.	370.	-1.
36	-2.	25.	58.	56.	25.	-5.	30.	16.	74.	28.
37	25.	220.	386.	328.	177.	37.	53.	51.	3374.	246.
38	42.	152.	393.	183.	208.	133.	196.	253.	478.	512.
39	-0.	-0.	-0.	0.	-0.	-1.	-0.	0.	-0.	-0.
40	-1.	4.	15.	-1.	-0.	-1.	-0.	-0.	1.	-2.
41	51.	123.	77.	166.	84.	218.	142.	20.	1344.	184.
42	42.	150.	115.	182.	64.	162.	78.	24.	1120.	184.
43	-2.	3.	21.	-1.	-0.	-6.	-1.	-2.	105.	-6.
44	-1.	-0.	-0.	0.	0.	-1.	-0.	-0.	-1.	0.
45	-1.	-0.	-0.	0.	0.	0.	-0.	-0.	-4.	-1.
46	0.	-1.	1.	1.	0.	1.	-1.	0.	1.	1.
47	19.	24.	75.	41.	23.	89.	37.	22.	531.	301.
48	-2.	-0.	-1.	-1.	0.	-0.	-0.	-1.	-1.	0.
49	12.	40.	57.	14.	-0.	2.	-2.	31.	243.	79.
50	-0.	-1.	2.	5.	-0.	28.	-3.	-2.	392.	594.
51	690.	-2.	-0.	0.	-0.	27.	-0.	-1.	-3.	-1.
52	-3.	242.	-7.	87.	0.	1.	-0.	-1.	194.	-2.

MATRIX .: UN PURE FLOW

COLUMN / ROW	51	52	53	54	55	56	57	58	59	60
53	47.	282.	487.	183.	65.	200.	-1.	36.	13.	12.
54	-1.	0.	-5.	80.	0.	1.	0.	0.	-1.	-0.
55	30.	17.	42.	49.	110.	94.	17.	21.	179.	7.
56	1.	-2.	6.	-1.	-6.	812.	-2.	-0.	112.	432.
57	249.	-7.	110.	-7.	-14.	1985.	235.	9.	28.	80.
58	-0.	43.	9.	-7.	100.	13.	-3.	112.	315.	27.
59	-5.	-3.	-4.	-7.	1.	4.	-16.	-38.	13372.	-1.
60	-0.	-2.	0.	-2.	-6.	-24.	-3.	-0.	-3.	2210.
61	-1.	-0.	0.	-0.	0.	0.	-0.	-0.	-2.	-2.
62	-1.	54.	-1.	109.	-0.	-18.	0.	1.	223.	211.
63	-1.	-0.	1.	-0.	-0.	1.	0.	0.	8.	37.
64	1.	8.	-1.	49.	0.	3.	3.	2.	3.	2.
65	34.	50.	96.	73.	55.	113.	67.	33.	673.	152.
66	21.	14.	31.	12.	10.	74.	30.	7.	63.	100.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	7.	17.	49.	29.	18.	43.	40.	14.	156.	79.
69	78.	158.	191.	170.	129.	371.	197.	94.	906.	262.
70	21.	11.	45.	13.	8.	39.	23.	7.	113.	42.
71	35.	18.	53.	18.	22.	116.	47.	10.	66.	48.
72	6.	3.	14.	5.	5.	19.	14.	4.	28.	58.
73	54.	47.	70.	261.	64.	305.	106.	27.	467.	283.
74	1.	3.	6.	1.	2.	16.	5.	0.	393.	18.
75	1.	0.	1.	1.	1.	2.	1.	0.	2.	3.
76	3.	2.	6.	2.	2.	14.	6.	1.	8.	17.
77	-1.	4.	6.	8.	3.	21.	7.	2.	38.	17.
78	0.	0.	1.	1.	0.	1.	1.	0.	4.	2.
79	1851.	1131.	3051.	1284.	1265.	5857.	2352.	1035.	11531.	5884.
80	3390.	3028.	5761.	3861.	2780.	11303.	4156.	1982.	38801.	12305.

MATRIX /: UN PURE FLOW

COLUMN / ROW	61	62	63	64	65	66	67	68	69	70
1	0.	0.	0.	-1.	3.	0.	-0.	1.	6.	2.
2	0.	6.	0.	12.	9.	1.	-0.	2.	16.	6.
3	-0.	0.	0.	3.	0.	0.	-0.	0.	1.	0.
4	-0.	-0.	-0.	-0.	-0.	-0.	0.	-0.	176.	-0.
5	-0.	0.	0.	-0.	0.	0.	0.	-1.	0.	0.
6	0.	0.	0.	-0.	0.	0.	0.	-0.	0.	0.
7	2.	0.	3.	1.	9.	0.	0.	750.	0.	0.
8	0.	0.	-0.	-1.	21.	0.	0.	2144.	0.	0.
9	-0.	0.	-0.	1.	-0.	-0.	0.	-0.	-0.	-0.
10	0.	0.	-0.	-0.	1.	0.	0.	-1.	0.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	5.	5.	3.	14.	1169.	379.	2.	1043.	314.	18.
13	-1.	-0.	-1.	0.	0.	0.	-0.	0.	1.	0.
14	10.	33.	7.	17.	185.	21.	-6.	35.	339.	120.
15	1.	1.	1.	1.	4.	2.	-0.	3.	26.	10.
16	1.	61.	1.	98.	-0.	-0.	-0.	-0.	-0.	-0.
17	36.	-1.	-1.	48.	18.	0.	-0.	0.	9.	0.
18	6.	6.	2.	14.	15.	4.	-0.	8.	10.	0.
19	18.	-1.	-0.	-2.	-0.	0.	0.	-0.	7.	0.
20	154.	1.	-1.	154.	3.	0.	-0.	-0.	10.	0.
21	0.	2.	-0.	3.	-0.	0.	0.	-0.	49.	0.
22	30.	-1.	-0.	18.	-0.	0.	0.	0.	0.	0.
23	6.	-0.	0.	-0.	-0.	0.	0.	0.	0.	0.
24	12.	12.	53.	135.	23.	18.	-8.	19.	830.	311.
25	-0.	22.	15.	126.	10.	-0.	-1.	-0.	587.	-0.
26	2.	6.	1.	3.	86.	27.	-29.	19.	276.	634.
27	3.	9.	161.	43.	41.	-0.	-10.	36.	21.	1.
28	13.	7.	9.	185.	-0.	0.	0.	-0.	36.	0.
29	1.	-3.	0.	-1.	5.	-2.	-11.	1.	52.	3.
30	22.	4.	-0.	57.	5.	-0.	-1.	-0.	3.	-0.
31	11.	8.	2.	20.	1585.	83.	-9.	260.	1340.	83.
32	61.	94.	32.	265.	203.	15.	-1.	6.	221.	10.
33	0.	-1.	-2.	15.	0.	0.	0.	-0.	0.	0.
34	0.	3.	4.	16.	1.	0.	-0.	1.	10.	2.
35	19.	14.	32.	33.	4.	0.	-0.	0.	33.	0.
36	19.	9.	6.	19.	8.	-0.	-1.	-0.	24.	0.
37	563.	105.	26.	199.	232.	0.	-0.	-3.	1.	1.
38	113.	167.	76.	248.	21.	7.	-0.	9.	-0.	-0.
39	-0.	12.	-0.	-1.	0.	0.	0.	-0.	0.	0.
40	184.	-1.	-0.	-0.	-0.	-0.	0.	-0.	-0.	-0.
41	24.	75.	9.	72.	7.	0.	-0.	-0.	26.	0.
42	114.	73.	15.	108.	106.	-0.	-1.	-0.	44.	2.
43	117.	-1.	0.	-2.	57.	-2.	-9.	-0.	-0.	-0.
44	-1.	0.	0.	-2.	-0.	-2.	-8.	-0.	-0.	-0.
45	6.	-0.	0.	-0.	-0.	-0.	-1.	-0.	-0.	-0.
46	1.	0.	0.	1.	1.	0.	0.	-0.	0.	0.
47	18.	45.	-1.	-2.	21.	-0.	-2.	0.	5.	-0.
48	-1.	-0.	-0.	-0.	0.	0.	0.	-0.	0.	0.
49	179.	10.	-0.	-2.	13.	0.	-0.	-0.	0.	0.
50	22.	-5.	2.	-1.	10.	1.	-0.	0.	4.	0.
51	0.	-2.	-0.	-1.	0.	-1.	-6.	0.	1.	2.
52	9.	-0.	0.	0.	1.	-2.	-9.	-0.	-0.	-0.

MATRIX ': UN PURE FLOW

COLUMN / ROW	61	62	63	64	65	66	67	68	69	70
53	121.	57.	12.	27.	29.	-2.	-10.	-0.	-0.	-0.
54	42.	0.	0.	0.	1.	0.	-0.	1.	6.	2.
55	12.	25.	5.	12.	13.	0.	-0.	28.	42.	0.
56	1.	-6.	-3.	0.	2.	172.	6.	1.	8.	3.
57	-1.	59.	-2.	19.	35.	0.	0.	-0.	0.	0.
58	4.	1.	-1.	-0.	85.	3.	-2.	2.	52.	2.
59	37.	-7.	0.	0.	113.	4.	-0.	2.	65.	2.
60	-4.	-2.	-5.	-1.	210.	-0.	-0.	0.	-0.	-0.
61	400.	-0.	0.	-1.	262.	-0.	-1.	-0.	-0.	-0.
62	1.	347.	-1.	0.	3.	-0.	-1.	0.	2.	1.
63	1.	15.	108.	4.	6.	1.	-13.	2.	21.	42.
64	2.	15.	0.	552.	12.	6.	-10.	5.	94.	84.
65	92.	55.	35.	126.	3330.	48.	-14.	718.	1405.	229.
66	12.	36.	15.	32.	380.	92.	69.	94.	1311.	848.
67	0.	0.	0.	0.	0.	0.	13.	0.	0.	0.
68	27.	20.	10.	30.	255.	137.	-17.	6527.	2144.	594.
69	150.	160.	86.	326.	1082.	117.	-30.	201.	2304.	413.
70	21.	26.	11.	36.	667.	108.	8.	254.	1944.	6062.
71	29.	41.	25.	73.	903.	224.	-66.	188.	6610.	1591.
72	7.	13.	6.	14.	38.	15.	-3.	17.	427.	59.
73	59.	190.	78.	217.	705.	208.	-28.	579.	5878.	2511.
74	3.	4.	2.	4.	624.	100.	-15.	52.	1006.	77.
75	1.	1.	0.	1.	4.	4.	605.	3.	115.	10.
76	2.	5.	2.	4.	48.	12.	-3.	11.	132.	362.
77	5.	9.	4.	10.	78.	51.	-57.	95.	547.	624.
78	1.	1.	0.	1.	55.	7.	-1.	9.	84.	13.
79	1761.	1849.	1472.	3032.	26061.	11086.	-243.	16414.	90880.	17925.
80	4569.	3687.	2311.	6431.	38874.	12942.	74.	29529.	119554.	32660.

MATRIX : UN PURE FLOW

COLUMN / ROW	71	72	73	74	75	76	77	78	79
1	0.	1.	6.	0.	19.	9.	0.	-0.	22502.
2	39.	3.	17.	1.	3.	44.	1.	1.	17691.
3	0.	0.	1.	0.	0.	1.	0.	0.	1411.
4	11.	-0.	-0.	-0.	-0.	0.	-1.	-0.	1755.
5	0.	0.	0.	0.	0.	0.	-0.	0.	1343.
6	0.	0.	0.	0.	0.	0.	-0.	0.	1239.
7	0.	1.	0.	0.	0.	11.	54.	-16.	2099.
8	0.	0.	0.	0.	0.	0.	-32.	-240.	11616.
9	1.	1.	-0.	-0.	-0.	-0.	-0.	-1.	1910.
10	0.	0.	0.	0.	0.	0.	-0.	2.	391.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	8007.	130.	-47.	15.	69.	663.	19.	1082.	14870.
13	0.	1.	1.	0.	0.	1.	0.	-0.	202.
14	25.	58.	333.	13.	52.	449.	13.	-8.	20062.
15	2.	4.	27.	1.	4.	12.	1.	-0.	1930.
16	-0.	44.	4.	-0.	-0.	-0.	3.	-0.	11293.
17	0.	6.	0.	0.	0.	0.	4.	-0.	2261.
18	0.	64.	1.	6.	0.	3.	-0.	-1.	3718.
19	0.	87.	0.	7.	0.	16.	6.	2.	1380.
20	0.	0.	1.	0.	0.	0.	-0.	-0.	9926.
21	0.	0.	0.	0.	0.	0.	-0.	-0.	378.
22	0.	0.	0.	0.	0.	0.	0.	-0.	658.
23	0.	0.	0.	0.	0.	0.	0.	0.	280.
24	13.	53.	146.	4.	3.	77.	9.	18.	10755.
25	-0.	24.	18.	-0.	-0.	2.	-3.	-2.	4391.
26	28.	21.	500.	3.	52.	531.	16.	4.	4875.
27	193.	58.	158.	5.	61.	48.	-1.	72.	12714.
28	0.	0.	0.	0.	0.	0.	1.	-0.	5059.
29	1.	251.	176.	0.	1.	602.	5.	2.	2105.
30	-0.	7.	15.	75.	-0.	0.	0.	-1.	2216.
31	38.	144.	165.	121.	17.	146.	4.	-23.	10086.
32	54.	58.	24.	237.	2.	44.	7.	-3.	6672.
33	0.	12.	0.	0.	0.	0.	0.	-0.	910.
34	0.	150.	5.	0.	6.	2.	1.	-0.	337.
35	0.	0.	0.	74.	0.	4.	0.	-1.	2426.
36	0.	62.	16.	110.	0.	3.	1.	16.	8543.
37	0.	0.	0.	0.	0.	0.	-0.	7.	22442.
38	-0.	5.	3.	-0.	-0.	-0.	-0.	-2.	12749.
39	0.	0.	0.	0.	0.	0.	-0.	0.	2290.
40	29.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	7348.
41	0.	0.	0.	123.	0.	2.	1.	-2.	3991.
42	0.	53.	19.	84.	0.	3.	-0.	-3.	7039.
43	-0.	-1.	141.	33.	-0.	-0.	-0.	-2.	1082.
44	-0.	-1.	122.	-0.	-0.	-0.	0.	0.	469.
45	-0.	-0.	20.	-0.	-0.	-0.	0.	-0.	768.
46	0.	0.	0.	0.	0.	0.	0.	-0.	593.
47	-0.	-0.	27.	1.	-0.	0.	-0.	-0.	2427.
48	0.	0.	0.	0.	0.	0.	-0.	0.	640.
49	0.	0.	0.	0.	0.	0.	-0.	-0.	2691.
50	0.	2.	3.	111.	0.	1.	0.	-1.	1954.
51	0.	-0.	92.	0.	-0.	1.	0.	0.	769.
52	-0.	-1.	145.	-0.	-0.	-0.	0.	-0.	1200.

MATRIX M: UN PURE FLOW

COLUMN / ROW	71	72	73	74	75	76	77	78	79
53	-0.	31.	165.	16.	-1.	-0.	-0.	1.	3023.
54	0.	147.	6.	0.	1.	3.	1.	-0.	581.
55	0.	8.	1.	13.	0.	1.	-0.	16.	2127.
56	1.	1.	15.	0.	1.	4.	0.	-0.	1959.
57	0.	404.	0.	0.	0.	3.	0.	-1.	3268.
58	1.	4.	40.	196.	0.	4.	0.	-3.	1189.
59	1.	5.	6.	858.	0.	5.	8.	-9.	14444.
60	-0.	-0.	1.	-0.	-0.	1.	-0.	-5.	3072.
61	-0.	8.	21.	-0.	-0.	-0.	-0.	-1.	712.
62	0.	3.	10.	0.	0.	236.	0.	0.	1660.
63	3.	131.	247.	0.	112.	72.	0.	1.	956.
64	7.	323.	174.	1.	37.	69.	1.	2.	2193.
65	128.	185.	609.	105.	97.	343.	638.	-95.	23503.
66	112.	125.	534.	70.	52.	403.	-1.	3.	6187.
67	0.	0.	0.	0.	0.	17.	0.	0.	30.
68	141.	220.	639.	72.	82.	950.	-47.	-163.	17015.
69	306.	437.	953.	1295.	140.	620.	25.	-41.	30974.
70	1800.	214.	253.	165.	101.	191.	-6.	17.	15438.
71	3072.	843.	1869.	303.	712.	2692.	90.	-48.	27730.
72	12.	423.	163.	14.	32.	219.	8.	-2.	2361.
73	1126.	399.	1920.	116.	336.	661.	61.	121.	29163.
74	44.	125.	247.	37.	18.	151.	9.	-12.	3957.
75	2.	6.	26.	1.	1489.	43.	-3.	-0.	2372.
76	20.	43.	79.	6.	20.	314.	-0.	4.	1594.
77	310.	36.	951.	6.	7.	249.	-3.	-13.	3375.
78	4.	9.	21.	5.	2.	23.	2.	-0.	367.
79	68340.	9531.	24185.	6465.	3928.	23149.	3637.	557.	547872.
80	83873.	14964.	35274.	10770.	7456.	33100.	4530.	1225.	1015579.

MATRIX : RAS FLOW MATRIX

COLUMN / ROW	1	2	3	4	5	6	7	8	9	10
1	4435.	1703.	0.	287.	0.	0.	0.	0.	0.	0.
2	7548.	737.	0.	0.	0.	0.	0.	1.	0.	0.
3	0.	0.	40.	0.	0.	0.	0.	0.	0.	0.
4	432.	1026.	93.	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	57.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	4.	264.	0.	0.	0.	0.
7	5.	1.	0.	0.	5.	1.	408.	0.	2.	0.
8	0.	0.	0.	0.	0.	0.	0.	291.	0.	0.
9	1.	78.	0.	0.	5.	0.	0.	0.	18.	4.
10	0.	32.	0.	0.	0.	0.	0.	0.	0.	22.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	182.	335.	0.	0.	1.	7.	15.	367.	11.	2.
13	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14	3286.	10.	58.	57.	1.	2.	3.	17.	3.	0.
15	0.	1.	0.	0.	0.	0.	0.	1.	0.	0.
16	0.	9.	0.	0.	0.	0.	0.	0.	0.	0.
17	8.	26.	70.	57.	0.	0.	0.	2.	0.	0.
18	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
19	15.	38.	1.	0.	0.	0.	0.	0.	0.	0.
20	2.	2.	0.	0.	2.	10.	17.	0.	0.	0.
21	0.	88.	0.	20.	0.	0.	0.	0.	0.	0.
22	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
23	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
24	12.	1.	1.	0.	0.	1.	1.	3.	7.	2.
25	1.	3.	0.	125.	0.	0.	0.	0.	0.	0.
26	6.	10.	1.	0.	0.	0.	1.	4.	1.	0.
27	52.	1309.	2.	1.	22.	56.	39.	98.	36.	12.
28	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
29	74.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30	0.	0.	5.	0.	0.	0.	0.	4.	0.	0.
31	155.	873.	40.	5.	11.	7.	23.	62.	38.	4.
32	26.	104.	1.	0.	7.	10.	33.	15.	73.	1.
33	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
34	7.	0.	0.	4.	0.	0.	0.	0.	0.	0.
35	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.
36	1.	35.	1.	0.	4.	2.	3.	39.	4.	0.
37	0.	0.	0.	0.	22.	27.	40.	29.	29.	10.
38	1.	1.	0.	0.	1.	0.	0.	0.	2.	1.
39	7.	12.	25.	0.	0.	0.	0.	0.	0.	0.
40	0.	0.	0.	0.	0.	1.	0.	18.	2.	0.
41	23.	0.	0.	0.	0.	0.	0.	0.	0.	0.
42	19.	28.	17.	190.	1.	4.	12.	13.	5.	0.
43	0.	0.	0.	0.	8.	10.	35.	15.	38.	3.
44	5.	206.	0.	0.	0.	0.	0.	0.	0.	0.
45	0.	0.	0.	0.	24.	29.	85.	24.	49.	11.
46	0.	0.	0.	0.	0.	3.	1.	0.	16.	3.
47	0.	0.	0.	0.	1.	1.	5.	0.	0.	0.
48	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
49	0.	0.	1.	0.	0.	1.	2.	24.	24.	1.
50	3.	6.	0.	0.	0.	32.	12.	0.	8.	1.
51	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
52	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

MATRIX ..: RAS FLOW MATRIX

COLUMN / ROW	1	2	3	4	5	6	7	8	9	10
53	0.	0.	0.	0.	0.	1.	7.	77.	8.	3.
54	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
55	1.	1.	42.	0.	0.	1.	11.	0.	1.	1.
56	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.
57	0.	0.	0.	0.	0.	0.	0.	14.	0.	0.
58	5.	23.	2.	0.	0.	0.	1.	1.	1.	0.
59	6.	13.	0.	0.	2.	2.	8.	3.	15.	1.
60	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.
61	0.	4.	24.	0.	0.	2.	9.	0.	0.	0.
62	0.	0.	1.	0.	0.	1.	0.	4.	0.	0.
63	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
64	2.	2.	0.	0.	0.	1.	0.	1.	0.	0.
65	559.	293.	60.	47.	130.	32.	51.	298.	40.	28.
66	48.	75.	0.	0.	1.	2.	4.	8.	1.	2.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	84.	179.	0.	1.	26.	39.	63.	108.	62.	24.
69	788.	766.	67.	62.	22.	28.	59.	143.	57.	10.
70	141.	285.	4.	8.	7.	24.	28.	90.	30.	4.
71	259.	1817.	0.	59.	111.	41.	73.	2141.	46.	8.
72	2.	4.	3.	3.	0.	1.	1.	8.	1.	0.
73	125.	754.	1.	0.	33.	14.	28.	103.	22.	4.
74	68.	143.	8.	1.	1.	2.	8.	40.	19.	1.
75	0.	1.	1.	1.	0.	0.	0.	2.	0.	0.
76	166.	12.	0.	0.	1.	1.	2.	5.	0.	1.
77	3.	3.	0.	0.	1.	1.	2.	5.	1.	1.
78	0.	1.	0.	0.	1.	1.	1.	3.	2.	1.
79	6127.	13737.	1181.	832.	954.	821.	1530.	7555.	1262.	310.
80	24694.	24788.	1751.	1765.	1470.	1482.	2621.	11643.	1937.	480.

MATRIX : RAS FLOW MATRIX

COLUMN / ROW	11	12	13	14	15	16	17	18	19	20
1	2.	1.	0.	15702.	0.	46.	187.	0.	0.	0.
2	348.	3.	1.	6254.	1182.	1334.	31.	1.	0.	1.
3	0.	0.	0.	297.	0.	0.	0.	113.	0.	919.
4	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	2.	38.	2.	12.	1.	2.	0.	2.
8	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9	489.	265.	0.	7.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	5.	0.	0.	0.	0.	0.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	18.	7.	7.	148.	7.	28.	9.	15.	5.	36.
13	5.	0.	168.	0.	0.	0.	0.	0.	0.	0.
14	125.	45.	16.	13067.	11.	42.	25.	25.	5.	10.
15	8.	3.	1.	5.	1759.	1.	0.	2.	0.	1.
16	31.	0.	0.	4.	0.	4114.	541.	4887.	859.	0.
17	122.	3.	0.	2.	0.	382.	244.	56.	344.	0.
18	30.	13.	5.	46.	0.	0.	28.	3194.	17.	14.
19	7.	0.	0.	91.	0.	0.	69.	259.	321.	0.
20	3558.	726.	20.	9.	1.	0.	0.	0.	10.	3207.
21	0.	0.	7.	86.	5.	0.	0.	0.	0.	1.
22	349.	0.	0.	0.	0.	0.	0.	0.	0.	0.
23	187.	4.	0.	0.	0.	0.	0.	0.	0.	0.
24	241.	83.	7.	1020.	39.	59.	48.	16.	2.	14.
25	4.	0.	9.	1121.	91.	66.	29.	126.	34.	17.
26	15.	6.	11.	552.	68.	6.	1.	14.	2.	5.
27	205.	55.	20.	198.	2.	332.	15.	14.	1.	96.
28	1.	0.	1.	103.	78.	1054.	540.	352.	35.	17.
29	5.	1.	1.	155.	6.	33.	8.	11.	0.	1.
30	309.	864.	0.	0.	0.	7.	0.	0.	0.	52.
31	1135.	549.	17.	209.	2.	21.	8.	17.	2.	48.
32	491.	141.	124.	253.	0.	28.	46.	25.	118.	9.
33	0.	0.	0.	2.	0.	1.	0.	40.	0.	2.
34	2.	1.	0.	1.	0.	0.	0.	0.	0.	0.
35	81.	94.	0.	769.	0.	40.	0.	0.	0.	14.
36	5850.	413.	0.	1.	0.	0.	0.	0.	0.	49.
37	2144.	321.	175.	2.	0.	0.	0.	0.	3.	47.
38	1260.	212.	224.	1.	0.	0.	0.	0.	3.	7.
39	0.	0.	0.	1586.	9.	0.	0.	0.	0.	0.
40	6159.	570.	0.	0.	0.	0.	0.	0.	0.	0.
41	114.	19.	7.	201.	0.	0.	0.	0.	0.	7.
42	974.	269.	42.	212.	42.	4.	1.	17.	3.	166.
43	25.	0.	0.	0.	0.	0.	0.	0.	0.	0.
44	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.
45	239.	72.	0.	0.	0.	0.	0.	0.	0.	0.
46	257.	96.	1.	7.	0.	2.	0.	2.	0.	4.
47	11.	0.	18.	0.	0.	0.	0.	0.	0.	0.
48	0.	0.	0.	35.	0.	73.	11.	7.	0.	33.
49	211.	44.	15.	4.	0.	1.	0.	1.	0.	1.
50	13.	1.	17.	4.	0.	0.	0.	0.	0.	1.
51	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
52	389.	112.	0.	0.	0.	0.	0.	0.	0.	0.

MATRIX : RAS FLOW MATRIX

COLUMN / ROW	11	12	13	14	15	16	17	18	19	20
53	334.	56.	30.	0.	0.	0.	0.	0.	0.	0.
54	189.	102.	0.	1.	0.	0.	0.	0.	0.	0.
55	1136.	186.	0.	1.	0.	0.	0.	0.	0.	0.
56	83.	22.	297.	2.	0.	0.	0.	1.	0.	0.
57	1.	1.	106.	0.	0.	0.	0.	0.	0.	0.
58	37.	10.	23.	7.	0.	0.	0.	0.	0.	1.
59	37.	14.	1.	15.	0.	0.	0.	1.	0.	3.
60	0.	0.	755.	0.	0.	0.	0.	0.	0.	0.
61	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.
62	211.	71.	36.	8.	1.	3.	1.	8.	1.	3.
63	7.	1.	22.	6.	1.	2.	0.	4.	1.	2.
64	95.	80.	3.	13.	1.	3.	40.	348.	5.	2.
65	2317.	561.	60.	2553.	47.	221.	84.	147.	34.	368.
66	182.	79.	65.	190.	3.	25.	9.	76.	14.	30.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	199.	87.	32.	473.	8.	120.	22.	61.	14.	81.
69	5503.	1724.	120.	2581.	67.	427.	207.	641.	173.	274.
70	402.	162.	33.	376.	15.	47.	14.	88.	20.	83.
71	306.	134.	37.	362.	13.	58.	22.	212.	31.	81.
72	46.	20.	20.	206.	15.	8.	4.	15.	6.	5.
73	2957.	281.	136.	2162.	309.	116.	37.	233.	34.	139.
74	232.	100.	11.	177.	1.	5.	2.	11.	2.	29.
75	11.	5.	2.	8.	1.	1.	0.	3.	1.	1.
76	60.	26.	10.	36.	1.	3.	1.	10.	2.	4.
77	17.	7.	12.	47.	12.	9.	3.	43.	6.	6.
78	28.	10.	1.	25.	0.	2.	0.	1.	1.	2.
79	25709.	11061.	3170.	21795.	3609.	3560.	1167.	6676.	900.	4541.
80	65519.	19794.	5895.	73241.	7409.	12298.	3458.	17777.	3014.	10437.

MATRIX : RAS FLOW MATRIX

COLUMN / ROW	21	22	23	24	25	26	27	28	29	30
1	0.	0.	0.	0.	0.	1.	1.	0.	3.	0.
2	0.	0.	0.	1.	0.	2.	21.	1.	10.	1.
3	0.	0.	0.	0.	0.	0.	30.	0.	1.	0.
4	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	91.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	86.	0.	0.	0.
7	0.	1.	1.	74.	1.	0.	72.	24.	3.	0.
8	0.	0.	0.	0.	0.	0.	32.	0.	0.	0.
9	0.	0.	0.	55.	0.	0.	35.	0.	3.	5.
10	0.	0.	0.	11.	0.	0.	295.	0.	2.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	1.	5.	3.	45.	12.	14.	86.	25.	25.	6.
13	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14	1.	8.	3.	139.	4.	50.	194.	27.	277.	112.
15	0.	1.	0.	1.	0.	3.	3.	1.	2.	1.
16	0.	215.	2.	69.	0.	2.	3.	1.	1.	0.
17	0.	102.	31.	17.	0.	13.	0.	0.	0.	0.
18	1.	7.	3.	9.	5.	0.	8.	3.	3.	1.
19	0.	1.	0.	0.	0.	0.	15.	0.	0.	0.
20	127.	550.	146.	766.	3.	15.	43.	3.	0.	0.
21	13.	1.	1.	0.	0.	0.	4.	2.	2.	1.
22	0.	73.	5.	0.	0.	0.	0.	0.	0.	0.
23	0.	0.	44.	0.	0.	0.	0.	0.	0.	0.
24	0.	5.	2.	2504.	2024.	1588.	188.	241.	85.	2.
25	1.	52.	30.	332.	130.	35.	96.	41.	213.	18.
26	0.	3.	2.	40.	10.	1180.	11.	3.	43.	2.
27	0.	7.	1.	440.	79.	204.	3215.	1836.	697.	453.
28	0.	7.	0.	169.	33.	19.	50.	104.	0.	211.
29	0.	1.	0.	13.	0.	2.	12.	18.	509.	9.
30	0.	90.	37.	0.	0.	13.	19.	0.	6.	1.
31	1.	6.	4.	104.	34.	24.	127.	23.	38.	101.
32	0.	236.	90.	144.	5.	39.	4.	5.	272.	1.
33	0.	4.	2.	2.	0.	0.	4.	1.	0.	0.
34	0.	0.	0.	0.	0.	1.	1.	0.	0.	0.
35	0.	27.	41.	0.	0.	0.	10.	0.	163.	0.
36	0.	0.	15.	14.	0.	0.	31.	0.	10.	5.
37	34.	92.	183.	1.	0.	1.	112.	0.	0.	6.
38	0.	32.	18.	0.	13.	4.	166.	2.	0.	22.
39	0.	0.	0.	0.	0.	0.	167.	15.	181.	146.
40	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
41	1.	7.	21.	0.	0.	0.	1.	0.	32.	0.
42	2.	257.	69.	148.	15.	10.	99.	2.	58.	1.
43	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
44	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
45	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
46	0.	1.	0.	5.	1.	1.	8.	1.	1.	0.
47	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
48	2.	0.	0.	29.	8.	18.	161.	0.	0.	0.
49	0.	0.	1.	25.	0.	0.	8.	1.	0.	0.
50	0.	0.	3.	0.	0.	0.	0.	0.	1.	0.
51	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
52	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

MATRIX : RAS FLOW MATRIX

COLUMN / ROW	21	22	23	24	25	26	27	28	29	30
53	0.	0.	0.	0.	0.	0.	16.	0.	0.	0.
54	0.	0.	0.	0.	0.	1.	1.	0.	1.	0.
55	0.	0.	2.	0.	0.	0.	0.	0.	3.	0.
56	0.	0.	0.	0.	0.	1.	1.	0.	1.	0.
57	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
58	0.	0.	0.	0.	0.	1.	1.	0.	0.	0.
59	0.	0.	0.	1.	0.	1.	1.	0.	1.	0.
60	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
61	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
62	0.	2.	1.	2.	1.	2.	2.	1.	5.	0.
63	0.	1.	0.	1.	1.	74.	2.	1.	1.	0.
64	0.	3.	1.	3.	1.	16.	4.	1.	2.	1.
65	22.	103.	42.	508.	148.	164.	542.	141.	186.	68.
66	1.	19.	12.	37.	20.	105.	67.	23.	41.	13.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	3.	22.	13.	260.	27.	45.	571.	70.	35.	11.
69	12.	175.	73.	418.	96.	211.	532.	183.	310.	120.
70	2.	35.	24.	71.	16.	65.	101.	34.	56.	15.
71	4.	85.	30.	77.	45.	481.	105.	44.	86.	21.
72	1.	6.	2.	24.	10.	36.	28.	8.	48.	14.
73	4.	82.	33.	197.	78.	275.	382.	165.	1277.	65.
74	1.	5.	3.	9.	5.	18.	15.	4.	6.	2.
75	0.	1.	0.	2.	0.	5.	4.	1.	3.	1.
76	0.	3.	2.	5.	3.	17.	9.	3.	6.	2.
77	0.	5.	3.	10.	4.	93.	13.	3.	17.	3.
78	0.	0.	0.	5.	0.	3.	8.	2.	1.	0.
79	148.	1586.	820.	5913.	1757.	4245.	7690.	2627.	3728.	874.
80	385.	3925.	1820.	12704.	4590.	9100.	15601.	5693.	8457.	2315.

MATRIX : RAS FLOW MATRIX

COLUMN / ROW	31	32	33	34	35	36	37	38	39	40
1	0.	0.	58.	0.	0.	0.	0.	0.	0.	0.
2	0.	1.	0.	0.	0.	8.	1.	1.	0.	1.
3	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
4	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	17.	1159.	15.	0.	0.
6	0.	0.	0.	0.	0.	0.	1.	883.	0.	0.
7	9.	9.	2.	0.	3.	79.	448.	13.	0.	1.
8	9051.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9	64.	10.	0.	0.	38.	733.	69.	18.	0.	1.
10	0.	0.	0.	0.	1.	10.	11.	0.	0.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	331.	27.	1.	4.	13.	42.	169.	44.	3.	15.
13	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14	33.	22.	244.	7.	5.	22.	22.	18.	3.	23.
15	1.	2.	0.	0.	0.	1.	2.	1.	0.	2.
16	0.	183.	0.	100.	0.	13.	0.	12.	0.	0.
17	0.	339.	0.	105.	0.	15.	0.	12.	0.	2.
18	3.	10.	0.	18.	4.	10.	20.	7.	2.	9.
19	0.	0.	0.	29.	0.	19.	0.	0.	0.	0.
20	4.	26.	1.	39.	54.	27.	30.	21.	2.	15.
21	0.	3.	0.	3.	11.	2.	3.	2.	0.	9.
22	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
23	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
24	111.	18.	0.	19.	3.	162.	12.	24.	1.	17.
25	57.	152.	3.	55.	134.	39.	16.	12.	43.	43.
26	7.	7.	0.	4.	2.	7.	12.	5.	103.	8.
27	515.	358.	32.	0.	133.	149.	403.	144.	8.	39.
28	0.	1620.	0.	9.	0.	70.	0.	127.	3.	0.
29	50.	1.	38.	7.	0.	24.	2.	1.	2.	6.
30	0.	10.	0.	0.	5.	0.	0.	1.	68.	92.
31	1541.	20.	4.	3.	9.	77.	153.	81.	4.	26.
32	1.	448.	1.	305.	63.	54.	14.	15.	7.	4.
33	2.	1.	179.	606.	0.	3.	5.	2.	0.	1.
34	0.	0.	0.	101.	0.	0.	0.	0.	0.	0.
35	0.	24.	0.	1.	191.	0.	0.	1.	0.	74.
36	31.	7.	1.	0.	70.	1035.	32.	34.	0.	14.
37	1.	50.	0.	7.	7.	107.	4742.	33.	989.	2033.
38	44.	16.	0.	1.	15.	21.	449.	4790.	35.	641.
39	127.	2.	0.	0.	0.	0.	1.	0.	1.	0.
40	0.	0.	0.	0.	1.	10.	0.	0.	0.	187.
41	0.	11.	0.	0.	1.	1.	134.	28.	18.	124.
42	6.	51.	1.	29.	1.	96.	348.	51.	4.	302.
43	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
44	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
45	0.	0.	0.	0.	0.	45.	0.	0.	0.	0.
46	4.	2.	0.	1.	1.	12.	11.	4.	0.	2.
47	0.	5.	0.	0.	3.	9.	11.	66.	3.	33.
48	0.	6.	0.	0.	0.	0.	20.	5.	0.	0.
49	2.	1.	0.	0.	0.	8.	115.	37.	0.	44.
50	0.	7.	0.	0.	0.	1.	164.	98.	0.	0.
51	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
52	0.	0.	0.	0.	0.	0.	14.	0.	0.	58.

MATRIX : RAS FLOW MATRIX

COLUMN / ROW	31	32	33	34	35	36	37	38	39	40
53	0.	0.	0.	0.	0.	0.	131.	22.	0.	101.
54	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
55	0.	0.	0.	0.	0.	14.	0.	3.	0.	0.
56	0.	1.	0.	0.	0.	0.	1.	0.	0.	1.
57	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
58	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
59	1.	4.	0.	0.	0.	2.	1.	1.	0.	1.
60	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
61	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
62	1.	2.	0.	2.	1.	2.	21.	3.	0.	54.
63	1.	2.	0.	1.	1.	1.	3.	1.	0.	3.
64	2.	13.	0.	56.	6.	16.	32.	9.	0.	3.
65	928.	205.	15.	44.	74.	544.	1147.	342.	62.	181.
66	24.	33.	2.	15.	10.	46.	100.	44.	4.	56.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	348.	103.	9.	13.	110.	289.	572.	306.	16.	62.
69	377.	304.	35.	113.	110.	241.	716.	416.	73.	292.
70	201.	49.	6.	22.	21.	75.	206.	70.	17.	55.
71	390.	76.	10.	28.	24.	59.	52.	54.	16.	111.
72	13.	21.	0.	4.	5.	13.	22.	9.	2.	38.
73	456.	231.	8.	85.	66.	190.	315.	139.	46.	149.
74	8.	8.	0.	2.	3.	26.	18.	7.	1.	10.
75	1.	2.	0.	1.	1.	2.	2.	1.	0.	3.
76	3.	6.	0.	2.	1.	7.	9.	4.	1.	7.
77	12.	10.	1.	11.	3.	8.	14.	7.	1.	9.
78	2.	2.	0.	0.	1.	2.	8.	3.	0.	1.
79	5424.	4690.	298.	1542.	1668.	4524.	11137.	5369.	817.	3404.
80	20186.	9212.	952.	3395.	2875.	8996.	23102.	13416.	2359.	8369.

MATRIX J: RAS FLOW MATRIX

COLUMN / ROW	41	42	43	44	45	46	47	48	49	50
1	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
2	0.	1.	0.	0.	0.	0.	1.	0.	1.	0.
3	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
4	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7	1.	2.	2.	2.	2.	0.	1.	1.	1.	0.
8	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	7.	14.	4.	3.	6.	2.	11.	5.	9.	7.
13	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14	8.	23.	5.	5.	8.	3.	15.	9.	13.	7.
15	1.	2.	0.	0.	1.	0.	1.	1.	1.	1.
16	0.	0.	0.	0.	0.	2.	0.	2.	0.	2.
17	0.	47.	0.	0.	0.	0.	0.	1.	0.	0.
18	6.	10.	2.	2.	3.	1.	6.	4.	5.	3.
19	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20	36.	49.	2.	7.	3.	1.	5.	14.	9.	2.
21	3.	5.	1.	1.	1.	0.	1.	1.	2.	1.
22	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
23	0.	0.	0.	2.	0.	0.	0.	0.	0.	0.
24	21.	20.	2.	2.	3.	1.	4.	3.	8.	2.
25	52.	96.	9.	9.	6.	2.	11.	4.	14.	9.
26	3.	8.	2.	3.	3.	2.	5.	4.	5.	2.
27	30.	137.	5.	7.	7.	3.	15.	11.	17.	5.
28	24.	0.	0.	0.	0.	0.	0.	4.	0.	0.
29	3.	5.	1.	0.	1.	0.	2.	2.	1.	1.
30	27.	72.	1.	15.	12.	5.	3.	2.	3.	0.
31	18.	22.	11.	6.	10.	6.	22.	24.	31.	5.
32	56.	115.	5.	54.	80.	47.	20.	36.	21.	7.
33	0.	1.	0.	13.	0.	0.	0.	4.	3.	0.
34	0.	11.	0.	0.	0.	0.	0.	0.	0.	0.
35	1.	10.	0.	0.	0.	0.	0.	0.	0.	0.
36	17.	77.	18.	8.	12.	2.	53.	8.	39.	20.
37	957.	1141.	231.	388.	627.	176.	430.	308.	582.	187.
38	270.	614.	94.	20.	40.	26.	99.	78.	181.	86.
39	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
40	0.	0.	4.	0.	38.	8.	21.	62.	38.	0.
41	101.	96.	58.	81.	47.	22.	53.	30.	34.	16.
42	49.	369.	25.	33.	75.	18.	28.	55.	101.	43.
43	0.	0.	193.	126.	113.	12.	0.	23.	14.	0.
44	0.	0.	0.	136.	0.	0.	0.	0.	0.	0.
45	0.	0.	0.	0.	164.	0.	0.	0.	0.	0.
46	1.	2.	8.	0.	1.	112.	4.	1.	1.	1.
47	35.	85.	62.	38.	121.	23.	406.	67.	91.	73.
48	4.	0.	0.	0.	0.	0.	1.	227.	0.	0.
49	2.	9.	72.	242.	227.	80.	187.	163.	413.	4.
50	0.	0.	66.	81.	17.	32.	0.	10.	0.	232.
51	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
52	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

MATRIX : RAS FLOW MATRIX

COLUMN / ROW	41	42	43	44	45	46	47	48	49	50
53	2.	33.	25.	7.	48.	59.	132.	100.	108.	4.
54	0.	0.	0.	4.	0.	0.	0.	0.	0.	0.
55	1.	1.	0.	11.	0.	0.	0.	0.	2.	0.
56	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.
57	0.	4.	0.	0.	0.	0.	0.	0.	7.	0.
58	0.	0.	38.	27.	4.	4.	0.	0.	1.	12.
59	0.	1.	5.	22.	8.	0.	0.	0.	0.	0.
60	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.
61	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.
62	1.	2.	7.	4.	1.	0.	1.	6.	33.	1.
63	1.	2.	0.	1.	1.	0.	1.	1.	1.	0.
64	1.	18.	1.	1.	1.	1.	2.	1.	2.	1.
65	84.	152.	33.	59.	62.	28.	63.	50.	70.	34.
66	25.	39.	10.	10.	16.	9.	26.	18.	29.	10.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	43.	87.	13.	16.	26.	7.	40.	20.	39.	18.
69	114.	280.	77.	111.	133.	58.	156.	130.	161.	57.
70	35.	65.	8.	22.	39.	10.	36.	26.	26.	19.
71	51.	93.	3.	12.	22.	15.	44.	92.	36.	29.
72	7.	17.	4.	6.	7.	3.	12.	7.	10.	5.
73	79.	177.	38.	73.	55.	27.	92.	54.	92.	40.
74	3.	8.	3.	3.	4.	2.	5.	4.	6.	2.
75	1.	3.	1.	1.	1.	0.	2.	1.	1.	1.
76	3.	7.	2.	2.	3.	2.	5.	3.	5.	2.
77	5.	9.	2.	4.	4.	2.	7.	5.	7.	3.
78	1.	1.	1.	0.	1.	0.	0.	0.	1.	0.
79	2203.	4215.	952.	1056.	1594.	624.	2724.	1616.	2468.	1107.
80	4396.	8262.	2104.	2739.	3656.	1439.	4761.	3299.	4746.	2063.

MATRIX : RAS FLOW MATRIX

COLUMN / ROW	51	52	53	54	55	56	57	58	59	60
1	0.	0.	0.	0.	0.	1.	0.	0.	1.	1.
2	1.	0.	1.	0.	0.	2.	1.	0.	2.	2.
3	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
4	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	5.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7	1.	1.	2.	2.	1.	1.	0.	1.	15.	1.
8	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	8.	6.	10.	4.	3.	10.	11.	2.	71.	20.
13	0.	0.	0.	0.	0.	22.	0.	0.	0.	0.
14	12.	6.	19.	9.	9.	32.	19.	5.	30.	39.
15	1.	0.	2.	1.	1.	3.	1.	0.	2.	3.
16	0.	0.	3.	6.	0.	1.	0.	2.	15.	6.
17	1.	5.	4.	0.	7.	0.	0.	0.	124.	2.
18	2.	3.	6.	3.	3.	10.	7.	2.	17.	11.
19	0.	0.	0.	0.	0.	0.	0.	0.	380.	0.
20	1.	7.	5.	10.	2.	3.	0.	1.	23.	3.
21	1.	11.	3.	7.	1.	6.	2.	1.	7.	3.
22	0.	0.	0.	0.	0.	187.	0.	0.	0.	0.
23	0.	0.	0.	0.	0.	0.	0.	0.	1.	36.
24	10.	5.	46.	6.	2.	24.	65.	2.	15.	11.
25	4.	23.	21.	58.	53.	28.	27.	18.	13.	10.
26	4.	3.	16.	7.	2.	42.	6.	1.	12.	15.
27	6.	20.	44.	29.	17.	14.	80.	47.	42.	15.
28	2.	0.	21.	19.	29.	43.	25.	10.	11.	16.
29	1.	0.	1.	1.	1.	2.	1.	0.	3.	3.
30	2.	23.	22.	38.	16.	2.	5.	0.	192.	14.
31	7.	8.	32.	7.	30.	24.	12.	3.	69.	44.
32	42.	76.	87.	223.	78.	97.	88.	91.	853.	66.
33	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.
34	0.	0.	0.	3.	0.	0.	0.	0.	0.	1.
35	1.	4.	5.	9.	102.	37.	144.	1.	362.	1.
36	0.	25.	58.	51.	23.	0.	29.	15.	78.	27.
37	39.	234.	385.	319.	167.	70.	68.	62.	3408.	284.
38	42.	154.	381.	186.	208.	177.	195.	245.	537.	502.
39	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
40	0.	6.	14.	1.	0.	0.	0.	0.	5.	0.
41	48.	114.	87.	153.	81.	220.	137.	22.	1339.	168.
42	40.	140.	119.	167.	61.	162.	77.	25.	1102.	175.
43	0.	3.	18.	0.	0.	0.	0.	0.	107.	3.
44	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
45	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
46	0.	0.	1.	0.	0.	1.	1.	0.	4.	2.
47	22.	25.	73.	44.	22.	94.	38.	22.	535.	266.
48	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.
49	17.	41.	55.	23.	1.	9.	1.	30.	262.	79.
50	0.	0.	5.	5.	0.	35.	0.	0.	402.	532.
51	629.	0.	0.	0.	0.	37.	0.	0.	0.	0.
52	0.	204.	0.	87.	0.	1.	0.	0.	187.	1.

MATRIX J: RAS FLOW MATRIX

COLUMN / ROW	51	52	53	54	55	56	57	58	59	60
53	46.	252.	438.	184.	61.	192.	8.	32.	34.	25.
54	0.	0.	0.	66.	0.	1.	0.	0.	1.	1.
55	27.	17.	43.	43.	100.	90.	19.	19.	179.	8.
56	1.	0.	8.	0.	0.	758.	4.	0.	112.	444.
57	219.	0.	112.	0.	1.	1881.	233.	9.	30.	114.
58	0.	38.	11.	0.	89.	16.	0.	98.	310.	29.
59	0.	0.	0.	0.	0.	1.	0.	3.	13148.	1.
60	0.	0.	0.	0.	0.	9.	0.	0.	0.	2086.
61	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
62	1.	52.	10.	95.	1.	7.	2.	1.	226.	194.
63	1.	0.	1.	0.	0.	3.	1.	0.	9.	37.
64	2.	7.	3.	43.	1.	5.	3.	2.	5.	5.
65	38.	51.	98.	72.	55.	119.	67.	34.	680.	152.
66	23.	15.	31.	14.	11.	75.	29.	7.	66.	102.
67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68	12.	18.	48.	28.	19.	46.	38.	14.	158.	76.
69	79.	152.	196.	168.	127.	375.	191.	89.	918.	267.
70	22.	13.	44.	16.	9.	42.	24.	7.	117.	47.
71	46.	21.	55.	23.	24.	116.	48.	12.	74.	58.
72	7.	4.	14.	6.	5.	20.	14.	4.	29.	54.
73	64.	50.	89.	225.	64.	305.	105.	29.	473.	284.
74	3.	3.	7.	2.	3.	16.	6.	2.	377.	19.
75	1.	1.	2.	1.	1.	4.	2.	1.	3.	4.
76	3.	3.	6.	2.	2.	14.	6.	1.	8.	17.
77	5.	4.	6.	8.	3.	19.	7.	2.	36.	17.
78	0.	0.	1.	1.	0.	1.	1.	0.	4.	2.
79	1847.	1177.	2988.	1385.	1279.	5789.	2308.	1006.	11576.	5901.
80	3390.	3028.	5761.	3861.	2780.	11303.	4156.	1982.	38801.	12305.

MATRIX : RAS FLOW MATRIX

COLUMN / ROW	61	62	63	64	65	66	67	68	69	70
1	0.	0.	0.	0.	3.	0.	0.	1.	6.	2.
2	1.	5.	0.	12.	10.	1.	0.	2.	18.	6.
3	0.	0.	0.	4.	0.	0.	0.	0.	1.	0.
4	0.	0.	0.	0.	0.	0.	0.	0.	189.	0.
5	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7	2.	0.	3.	1.	9.	0.	0.	748.	0.	0.
8	0.	0.	0.	0.	22.	0.	0.	2214.	0.	0.
9	0.	0.	0.	2.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	7.	7.	4.	15.	1202.	377.	0.	1066.	415.	110.
13	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.
14	11.	32.	7.	21.	189.	25.	0.	36.	347.	121.
15	1.	1.	1.	1.	4.	2.	0.	3.	26.	10.
16	1.	55.	2.	97.	0.	0.	0.	0.	0.	0.
17	33.	2.	0.	46.	17.	0.	0.	0.	9.	0.
18	6.	6.	2.	14.	15.	4.	0.	8.	10.	0.
19	16.	0.	0.	0.	0.	0.	0.	0.	7.	0.
20	145.	4.	1.	145.	3.	0.	0.	0.	10.	0.
21	0.	2.	0.	3.	0.	0.	0.	0.	49.	0.
22	29.	0.	0.	16.	0.	0.	0.	0.	0.	0.
23	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.
24	13.	15.	59.	143.	27.	22.	0.	22.	941.	344.
25	2.	24.	15.	116.	10.	0.	0.	0.	586.	0.
26	3.	7.	2.	10.	101.	38.	0.	23.	325.	724.
27	4.	17.	151.	49.	42.	2.	0.	46.	24.	4.
28	13.	10.	10.	179.	0.	0.	0.	0.	37.	0.
29	1.	1.	0.	1.	5.	1.	0.	1.	52.	3.
30	22.	5.	0.	52.	5.	0.	0.	0.	3.	0.
31	12.	9.	3.	22.	1602.	84.	0.	266.	1355.	83.
32	62.	90.	33.	246.	204.	15.	0.	6.	223.	10.
33	0.	1.	0.	15.	0.	0.	0.	0.	0.	0.
34	0.	3.	4.	15.	1.	0.	0.	1.	11.	2.
35	18.	16.	30.	31.	4.	0.	0.	0.	33.	0.
36	19.	10.	5.	20.	8.	0.	0.	0.	24.	0.
37	566.	117.	27.	191.	233.	0.	0.	0.	1.	1.
38	121.	162.	75.	230.	21.	7.	0.	10.	0.	0.
39	0.	11.	0.	0.	0.	0.	0.	0.	0.	0.
40	173.	0.	0.	0.	0.	0.	0.	0.	0.	0.
41	27.	70.	10.	67.	7.	0.	0.	0.	26.	0.
42	112.	71.	16.	100.	105.	0.	0.	0.	43.	2.
43	111.	0.	0.	0.	56.	0.	0.	0.	0.	0.
44	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
45	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.
46	1.	0.	0.	1.	1.	0.	0.	0.	0.	0.
47	21.	44.	0.	0.	21.	0.	0.	0.	5.	0.
48	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
49	174.	13.	0.	0.	13.	0.	0.	0.	0.	0.
50	24.	0.	2.	0.	11.	1.	0.	0.	4.	0.
51	0.	0.	0.	0.	0.	0.	0.	0.	1.	2.
52	9.	0.	0.	1.	1.	0.	0.	0.	0.	0.

MATRIX : RAS FLOW MATRIX

COLUMN / ROW	61	62	63	64	65	66	67	68	69	70
53	118.	57.	12.	27.	29.	0.	0.	0.	0.	0.
54	40.	0.	0.	1.	1.	0.	0.	1.	6.	2.
55	12.	23.	5.	12.	13.	0.	0.	28.	43.	0.
56	2.	0.	0.	1.	2.	170.	0.	1.	8.	3.
57	0.	65.	3.	19.	36.	0.	0.	0.	0.	0.
58	5.	2.	0.	0.	85.	3.	0.	2.	52.	2.
59	37.	0.	0.	0.	114.	4.	0.	2.	66.	2.
60	0.	2.	0.	0.	216.	0.	0.	0.	0.	0.
61	374.	0.	0.	0.	263.	0.	0.	0.	0.	0.
62	3.	298.	0.	2.	3.	0.	0.	0.	2.	1.
63	1.	14.	100.	6.	6.	5.	0.	2.	22.	42.
64	4.	14.	1.	499.	12.	8.	0.	5.	95.	82.
65	92.	56.	36.	126.	3357.	55.	1.	732.	1419.	227.
66	14.	34.	16.	35.	382.	97.	3.	95.	1320.	832.
67	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.
68	27.	21.	11.	36.	249.	137.	1.	6367.	2079.	562.
69	151.	154.	84.	311.	1085.	126.	1.	205.	2312.	407.
70	22.	27.	12.	38.	672.	110.	1.	257.	1965.	5918.
71	31.	44.	27.	89.	908.	242.	1.	197.	6606.	1576.
72	8.	13.	6.	14.	38.	16.	0.	17.	426.	57.
73	62.	181.	77.	223.	707.	227.	3.	583.	5868.	2448.
74	4.	5.	2.	6.	614.	99.	0.	52.	991.	75.
75	1.	2.	1.	2.	6.	6.	25.	4.	167.	14.
76	2.	4.	2.	5.	49.	13.	0.	11.	134.	358.
77	5.	8.	4.	15.	74.	59.	0.	91.	519.	574.
78	1.	1.	0.	1.	54.	7.	0.	9.	83.	12.
79	1781.	1850.	1450.	3092.	25947.	10978.	37.	16415.	90589.	18037.
80	4569.	3687.	2311.	6431.	38874.	12942.	74.	29529.	119554.	32660.

MATRIX : RAS FLOW MATRIX

COLUMN / ROW	71	72	73	74	75	76	77	78	79
1	0.	1.	6.	0.	17.	9.	0.	0.	22483.
2	41.	3.	18.	1.	3.	47.	1.	0.	17677.
3	0.	0.	1.	0.	0.	1.	0.	0.	1411.
4	12.	0.	0.	0.	0.	0.	0.	0.	1755.
5	0.	0.	0.	0.	0.	0.	0.	0.	1343.
6	0.	0.	0.	0.	0.	0.	0.	0.	1239.
7	0.	1.	0.	0.	0.	11.	52.	14.	2100.
8	0.	0.	0.	0.	0.	0.	0.	7.	11616.
9	1.	1.	0.	0.	0.	0.	0.	0.	1911.
10	0.	0.	0.	0.	0.	0.	-0.	0.	391.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	8157.	148.	43.	24.	73.	678.	33.	225.	14871.
13	0.	1.	1.	0.	0.	0.	0.	0.	202.
14	26.	60.	334.	13.	49.	461.	13.	0.	20047.
15	2.	5.	26.	1.	4.	12.	1.	0.	1929.
16	0.	44.	4.	0.	0.	0.	2.	0.	11292.
17	0.	6.	0.	0.	0.	0.	3.	0.	2261.
18	0.	63.	1.	6.	0.	3.	0.	0.	3717.
19	0.	83.	0.	6.	0.	16.	5.	0.	1380.
20	0.	0.	0.	0.	0.	0.	0.	0.	9928.
21	0.	0.	0.	0.	0.	0.	0.	0.	378.
22	0.	0.	0.	0.	0.	0.	0.	0.	658.
23	0.	0.	0.	0.	0.	0.	0.	0.	280.
24	15.	60.	162.	5.	4.	87.	13.	5.	10754.
25	0.	24.	17.	0.	0.	2.	0.	0.	4390.
26	34.	27.	576.	4.	56.	625.	18.	2.	4874.
27	197.	59.	160.	6.	56.	49.	2.	14.	12714.
28	0.	0.	0.	0.	0.	0.	1.	0.	5058.
29	1.	244.	171.	0.	1.	598.	4.	0.	2105.
30	0.	7.	14.	75.	0.	0.	0.	0.	2217.
31	38.	144.	164.	122.	16.	148.	13.	10.	10086.
32	55.	57.	24.	238.	2.	45.	7.	1.	6673.
33	0.	11.	0.	0.	0.	0.	0.	0.	910.
34	0.	149.	5.	0.	5.	2.	1.	0.	337.
35	0.	0.	0.	74.	0.	4.	0.	0.	2426.
36	0.	61.	15.	110.	0.	3.	1.	3.	8544.
37	0.	0.	0.	0.	0.	0.	0.	2.	22446.
38	0.	5.	3.	0.	0.	0.	0.	0.	12751.
39	0.	0.	0.	0.	0.	0.	0.	0.	2289.
40	30.	0.	0.	0.	0.	0.	0.	0.	7349.
41	0.	0.	0.	125.	0.	2.	1.	0.	3992.
42	0.	52.	18.	83.	0.	3.	0.	0.	7040.
43	0.	0.	135.	32.	0.	0.	0.	0.	1082.
44	0.	0.	119.	0.	0.	0.	0.	0.	469.
45	0.	0.	19.	0.	0.	0.	0.	0.	768.
46	0.	0.	0.	0.	0.	0.	0.	0.	594.
47	0.	0.	27.	1.	0.	0.	0.	0.	2427.
48	0.	0.	0.	0.	0.	0.	0.	0.	640.
49	0.	0.	0.	0.	0.	0.	0.	0.	2691.
50	0.	2.	3.	115.	0.	1.	0.	0.	1954.
51	0.	0.	97.	0.	0.	1.	0.	0.	769.
52	0.	0.	137.	0.	0.	0.	0.	0.	1200.

MATRIX : RAS FLOW MATRIX

COLUMN / ROW	71	72	73	74	75	76	77	78	79
53	0.	31.	160.	16.	0.	0.	0.	0.	3024.
54	0.	146.	6.	0.	1.	3.	1.	0.	581.
55	0.	8.	1.	13.	0.	1.	0.	4.	2127.
56	1.	1.	15.	0.	1.	4.	0.	0.	1959.
57	0.	408.	0.	0.	0.	3.	0.	0.	3268.
58	1.	5.	39.	194.	0.	4.	0.	0.	1189.
59	1.	5.	6.	865.	0.	5.	6.	1.	14447.
60	0.	0.	1.	0.	0.	1.	0.	0.	3073.
61	0.	8.	21.	0.	0.	0.	0.	1.	712.
62	0.	3.	10.	0.	0.	240.	0.	0.	1660.
63	4.	132.	245.	0.	102.	73.	1.	0.	956.
64	8.	320.	171.	1.	34.	69.	1.	1.	2193.
65	130.	187.	604.	106.	90.	348.	529.	15.	23502.
66	114.	126.	528.	71.	49.	407.	7.	5.	6187.
67	0.	0.	0.	0.	0.	29.	0.	0.	30.
68	138.	213.	609.	70.	73.	924.	49.	116.	17016.
69	310.	435.	940.	1293.	129.	624.	34.	7.	30973.
70	1817.	216.	269.	167.	94.	193.	12.	18.	15440.
71	3082.	839.	1856.	304.	644.	2688.	106.	8.	27732.
72	12.	414.	160.	14.	29.	220.	9.	1.	2361.
73	1132.	403.	1888.	117.	307.	662.	84.	42.	29164.
74	44.	122.	239.	37.	17.	149.	12.	2.	3958.
75	3.	9.	37.	1.	1930.	62.	1.	0.	2371.
76	20.	44.	79.	6.	18.	320.	1.	1.	1594.
77	294.	38.	879.	6.	9.	235.	2.	1.	3375.
78	4.	9.	21.	5.	2.	23.	2.	0.	367.
79	68145.	9522.	24187.	6443.	3638.	23004.	3500.	716.	547901.
80	83873.	14964.	35274.	10770.	7456.	33100.	4530.	1225.	1015579.

Appendix 6

INVERSE MATRICES (78-Industry Level)

BEA Inverse Matrix

UN Inverse Matrix

OBE Inverse Matrix

MRIO Inverse Matrix

RAS Inverse Matrix

MATRIX : BEA INVERSE

COLUMN / ROW	1	2	3	4	5	6	7	8	9	10
1	1.3127	0.0990	0.0495	0.1830	0.0017	0.0020	0.0017	0.0024	0.0020	0.0015
2	0.4199	1.0624	0.0455	0.0721	0.0015	0.0018	0.0015	0.0023	0.0019	0.0014
3	0.0014	0.0007	1.0209	0.0013	0.0005	0.0013	0.0012	0.0004	0.0004	0.0004
4	0.0388	0.0433	0.0504	1.0183	0.0003	0.0003	0.0003	0.0004	0.0002	0.0002
5	0.0007	0.0009	0.0011	0.0015	1.0401	0.0026	0.0024	0.0006	0.0023	0.0025
6	0.0006	0.0009	0.0008	0.0014	0.0071	1.2102	0.0009	0.0005	0.0016	0.0013
7	0.0018	0.0015	0.0012	0.0019	0.0063	0.0043	1.1870	0.0011	0.0051	0.0047
8	0.0172	0.0246	0.0159	0.0134	0.0099	0.0104	0.0111	1.0320	0.0199	0.0135
9	0.0024	0.0045	0.0010	0.0022	0.0042	0.0010	0.0008	0.0013	1.0150	0.0086
10	0.0013	0.0028	0.0006	0.0013	0.0005	0.0014	0.0006	0.0003	0.0008	1.0471
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0279	0.0295	0.0096	0.0183	0.0160	0.0167	0.0164	0.0532	0.0165	0.0161
13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
14	0.2170	0.0211	0.0577	0.0603	0.0035	0.0049	0.0042	0.0043	0.0050	0.0039
15	0.0002	0.0002	0.0004	0.0004	0.0002	0.0003	0.0003	0.0002	0.0003	0.0002
16	0.0026	0.0028	0.0116	0.0085	0.0007	0.0014	0.0013	0.0006	0.0026	0.0014
17	0.0028	0.0031	0.0415	0.0271	0.0005	0.0009	0.0011	0.0005	0.0021	0.0005
18	0.0005	0.0003	0.0007	0.0008	0.0003	0.0004	0.0004	0.0002	0.0005	0.0003
19	0.0022	0.0022	0.0023	0.0016	0.0001	0.0002	0.0002	0.0001	0.0005	0.0002
20	0.0045	0.0052	0.0030	0.0100	0.0044	0.0135	0.0131	0.0035	0.0032	0.0030
21	0.0023	0.0044	0.0010	0.0100	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
22	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000
23	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
24	0.0129	0.0081	0.0082	0.0329	0.0042	0.0053	0.0051	0.0036	0.0105	0.0079
25	0.0076	0.0044	0.0060	0.0554	0.0011	0.0017	0.0017	0.0009	0.0027	0.0015
26	0.0052	0.0036	0.0030	0.0034	0.0024	0.0026	0.0024	0.0020	0.0026	0.0022
27	0.0386	0.0757	0.0193	0.0378	0.0242	0.0604	0.0278	0.0149	0.0331	0.0383
28	0.0029	0.0028	0.0093	0.0076	0.0019	0.0029	0.0040	0.0013	0.0085	0.0019
29	0.0056	0.0011	0.0012	0.0015	0.0004	0.0005	0.0004	0.0004	0.0008	0.0007
30	0.0017	0.0017	0.0039	0.0018	0.0010	0.0012	0.0013	0.0030	0.0013	0.0012
31	0.0326	0.0469	0.0327	0.0247	0.0155	0.0118	0.0163	0.0110	0.0268	0.0165
32	0.0067	0.0071	0.0048	0.0060	0.0074	0.0106	0.0183	0.0032	0.0403	0.0058
33	0.0002	0.0001	0.0001	0.0005	0.0001	0.0001	0.0001	0.0000	0.0001	0.0001
34	0.0005	0.0002	0.0002	0.0019	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
35	0.0033	0.0007	0.0019	0.0012	0.0004	0.0005	0.0007	0.0006	0.0007	0.0005
36	0.0022	0.0033	0.0018	0.0026	0.0040	0.0032	0.0033	0.0057	0.0116	0.0023
37	0.0096	0.0088	0.0175	0.0208	0.0292	0.0444	0.0423	0.0097	0.0387	0.0412
38	0.0042	0.0047	0.0080	0.0128	0.0060	0.0091	0.0089	0.0043	0.0112	0.0118
39	0.0061	0.0022	0.0145	0.0023	0.0005	0.0009	0.0006	0.0005	0.0008	0.0008
40	0.0009	0.0010	0.0009	0.0007	0.0011	0.0022	0.0012	0.0033	0.0020	0.0018
41	0.0027	0.0011	0.0019	0.0020	0.0012	0.0019	0.0024	0.0008	0.0027	0.0018
42	0.0073	0.0070	0.0159	0.0821	0.0035	0.0072	0.0098	0.0033	0.0074	0.0046
43	0.0007	0.0010	0.0007	0.0006	0.0077	0.0108	0.0193	0.0018	0.0217	0.0091
44	0.0042	0.0096	0.0012	0.0036	0.0002	0.0001	0.0002	0.0001	0.0002	0.0001
45	0.0004	0.0005	0.0002	0.0004	0.0184	0.0251	0.0400	0.0025	0.0257	0.0261
46	0.0003	0.0003	0.0002	0.0003	0.0004	0.0033	0.0006	0.0003	0.0090	0.0074
47	0.0005	0.0006	0.0008	0.0013	0.0023	0.0033	0.0051	0.0006	0.0030	0.0021
48	0.0006	0.0009	0.0005	0.0009	0.0003	0.0007	0.0004	0.0002	0.0005	0.0006
49	0.0010	0.0015	0.0015	0.0012	0.0023	0.0038	0.0054	0.0030	0.0163	0.0061
50	0.0008	0.0010	0.0008	0.0009	0.0016	0.0291	0.0072	0.0004	0.0062	0.0042
51	0.0002	0.0002	0.0001	0.0002	0.0002	0.0001	0.0002	0.0001	0.0002	0.0001
52	0.0004	0.0004	0.0002	0.0003	0.0003	0.0003	0.0003	0.0005	0.0004	0.0003

MATRIX : BEA INVERSE

COLUMN / ROW	1	2	3	4	5	6	7	8	9	10
53	0.0009	0.0011	0.0016	0.0013	0.0013	0.0025	0.0058	0.0082	0.0065	0.0097
54	0.0002	0.0002	0.0003	0.0002	0.0001	0.0002	0.0002	0.0003	0.0002	0.0002
55	0.0006	0.0006	0.0219	0.0004	0.0005	0.0009	0.0056	0.0007	0.0012	0.0020
56	0.0003	0.0003	0.0003	0.0003	0.0003	0.0005	0.0003	0.0006	0.0004	0.0003
57	0.0003	0.0003	0.0004	0.0004	0.0004	0.0004	0.0005	0.0018	0.0006	0.0005
58	0.0013	0.0016	0.0024	0.0009	0.0008	0.0010	0.0013	0.0005	0.0018	0.0009
59	0.0027	0.0026	0.0022	0.0020	0.0040	0.0045	0.0074	0.0016	0.0138	0.0041
60	0.0004	0.0003	0.0004	0.0007	0.0008	0.0005	0.0005	0.0003	0.0006	0.0006
61	0.0006	0.0005	0.0135	0.0005	0.0009	0.0020	0.0047	0.0003	0.0005	0.0011
62	0.0004	0.0003	0.0007	0.0004	0.0006	0.0008	0.0005	0.0008	0.0006	0.0004
63	0.0005	0.0005	0.0003	0.0005	0.0004	0.0004	0.0004	0.0003	0.0004	0.0003
64	0.0010	0.0009	0.0013	0.0013	0.0006	0.0016	0.0007	0.0007	0.0010	0.0007
65	0.0592	0.0316	0.0516	0.0486	0.1071	0.0423	0.0377	0.0363	0.0404	0.0784
66	0.0084	0.0071	0.0036	0.0057	0.0043	0.0050	0.0049	0.0034	0.0044	0.0077
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
68	0.0214	0.0214	0.0102	0.0168	0.0317	0.0509	0.0450	0.0183	0.0517	0.0766
69	0.0798	0.0535	0.0595	0.0639	0.0282	0.0374	0.0411	0.0249	0.0466	0.0363
70	0.0247	0.0243	0.0113	0.0195	0.0143	0.0310	0.0222	0.0185	0.0256	0.0178
71	0.0670	0.1012	0.0255	0.0718	0.0926	0.0467	0.0456	0.2030	0.0387	0.0306
72	0.0020	0.0013	0.0025	0.0027	0.0011	0.0017	0.0016	0.0014	0.0019	0.0013
73	0.0427	0.0497	0.0185	0.0312	0.0352	0.0256	0.0261	0.0203	0.0279	0.0227
74	0.0094	0.0087	0.0071	0.0057	0.0035	0.0038	0.0053	0.0052	0.0117	0.0039
75	0.0012	0.0013	0.0008	0.0011	0.0010	0.0009	0.0009	0.0008	0.0009	0.0007
76	0.0100	0.0019	0.0014	0.0022	0.0012	0.0016	0.0016	0.0010	0.0010	0.0034
77	0.0030	0.0028	0.0017	0.0025	0.0028	0.0031	0.0027	0.0024	0.0026	0.0042
78	0.0004	0.0003	0.0004	0.0003	0.0007	0.0009	0.0005	0.0004	0.0014	0.0015
79	2.5549	1.8205	1.7114	2.0219	1.5701	1.7833	1.7333	1.5346	1.6476	1.6100

MATRIX : BEA INVERSE

COLUMN / ROW	11	12	13	14	15	16	17	18	19	20
1	0.0039	0.0033	0.0026	0.3455	0.0211	0.0307	0.0812	0.0134	0.0239	0.0100
2	0.0083	0.0027	0.0024	0.2170	0.2124	0.1707	0.0698	0.0604	0.0848	0.0085
3	0.0074	0.0050	0.0008	0.0061	0.0005	0.0008	0.0011	0.0085	0.0013	0.1252
4	0.0010	0.0006	0.0003	0.0151	0.0087	0.0074	0.0043	0.0031	0.0040	0.0074
5	0.0050	0.0026	0.0034	0.0013	0.0005	0.0012	0.0011	0.0007	0.0009	0.0013
6	0.0045	0.0026	0.0070	0.0006	0.0004	0.0012	0.0012	0.0008	0.0011	0.0009
7	0.0045	0.0024	0.0029	0.0028	0.0013	0.0047	0.0040	0.0026	0.0035	0.0020
8	0.0157	0.0195	0.0061	0.0127	0.0069	0.0149	0.0134	0.0084	0.0109	0.0102
9	0.0164	0.0161	0.0009	0.0019	0.0012	0.0017	0.0014	0.0009	0.0013	0.0014
10	0.0006	0.0006	0.0004	0.0010	0.0008	0.0027	0.0023	0.0012	0.0017	0.0006
11	1.0000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0116	1.0096	0.0085	0.0192	0.0099	0.0170	0.0157	0.0115	0.0145	0.0136
13	0.0001	0.0000	1.0256	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
14	0.0080	0.0090	0.0075	1.2742	0.0087	0.0173	0.0292	0.0117	0.0147	0.0121
15	0.0004	0.0004	0.0005	0.0003	1.3121	0.0003	0.0003	0.0004	0.0004	0.0003
16	0.0043	0.0020	0.0031	0.0034	0.0011	1.5119	0.2749	0.5106	0.5029	0.0035
17	0.0041	0.0014	0.0017	0.0021	0.0009	0.0544	1.0891	0.0257	0.1339	0.0058
18	0.0015	0.0014	0.0018	0.0014	0.0002	0.0020	0.0110	1.2169	0.0117	0.0027
19	0.0007	0.0003	0.0002	0.0027	0.0005	0.0028	0.0248	0.0212	1.0966	0.0005
20	0.0830	0.0553	0.0075	0.0071	0.0042	0.0050	0.0068	0.0043	0.0099	1.4281
21	0.0004	0.0003	0.0012	0.0026	0.0018	0.0009	0.0005	0.0004	0.0005	0.0006
22	0.0054	0.0001	0.0011	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001
23	0.0029	0.0002	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
24	0.0155	0.0120	0.0097	0.0391	0.0245	0.0271	0.0407	0.0203	0.0282	0.0094
25	0.0047	0.0037	0.0047	0.0248	0.0189	0.0136	0.0170	0.0156	0.0200	0.0050
26	0.0046	0.0032	0.0047	0.0144	0.0152	0.0039	0.0041	0.0040	0.0043	0.0032
27	0.0213	0.0254	0.0163	0.0303	0.0246	0.1186	0.1024	0.0548	0.0753	0.0270
28	0.0066	0.0078	0.0075	0.0055	0.0155	0.1420	0.1947	0.0758	0.1019	0.0058
29	0.0012	0.0010	0.0009	0.0049	0.0018	0.0057	0.0050	0.0033	0.0036	0.0008
30	0.0076	0.0451	0.0016	0.0021	0.0008	0.0020	0.0015	0.0013	0.0016	0.0083
31	0.0294	0.0389	0.0094	0.0225	0.0120	0.0178	0.0153	0.0105	0.0133	0.0175
32	0.0142	0.0119	0.0236	0.0092	0.0026	0.0083	0.0205	0.0075	0.0420	0.0043
33	0.0002	0.0001	0.0002	0.0002	0.0001	0.0003	0.0003	0.0038	0.0007	0.0004
34	0.0002	0.0001	0.0002	0.0002	0.0001	0.0001	0.0002	0.0002	0.0002	0.0001
35	0.0037	0.0063	0.0025	0.0148	0.0004	0.0059	0.0021	0.0024	0.0033	0.0026
36	0.1028	0.0256	0.0033	0.0021	0.0011	0.0017	0.0017	0.0011	0.0015	0.0087
37	0.0886	0.0443	0.0609	0.0216	0.0055	0.0083	0.0084	0.0062	0.0086	0.0200
38	0.0543	0.0300	0.0859	0.0054	0.0029	0.0054	0.0060	0.0048	0.0066	0.0086
39	0.0012	0.0036	0.0006	0.0284	0.0024	0.0026	0.0028	0.0015	0.0018	0.0028
40	0.0968	0.0299	0.0007	0.0007	0.0004	0.0008	0.0007	0.0005	0.0006	0.0007
41	0.0063	0.0037	0.0110	0.0049	0.0005	0.0008	0.0010	0.0008	0.0010	0.0022
42	0.0270	0.0201	0.0177	0.0083	0.0101	0.0042	0.0044	0.0041	0.0048	0.0271
43	0.0018	0.0010	0.0008	0.0007	0.0005	0.0006	0.0005	0.0004	0.0005	0.0005
44	0.0003	0.0002	0.0002	0.0022	0.0021	0.0016	0.0008	0.0007	0.0009	0.0005
45	0.0052	0.0046	0.0005	0.0004	0.0002	0.0005	0.0004	0.0003	0.0004	0.0003
46	0.0048	0.0056	0.0004	0.0004	0.0002	0.0006	0.0005	0.0005	0.0005	0.0007
47	0.0028	0.0017	0.0148	0.0006	0.0004	0.0007	0.0006	0.0004	0.0006	0.0009
48	0.0008	0.0006	0.0005	0.0012	0.0005	0.0109	0.0068	0.0045	0.0059	0.0050
49	0.0067	0.0045	0.0072	0.0010	0.0005	0.0014	0.0012	0.0008	0.0011	0.0012
50	0.0021	0.0013	0.0214	0.0008	0.0003	0.0005	0.0005	0.0004	0.0005	0.0007
51	0.0003	0.0002	0.0005	0.0003	0.0003	0.0002	0.0002	0.0002	0.0002	0.0002
52	0.0078	0.0068	0.0006	0.0004	0.0003	0.0003	0.0003	0.0002	0.0003	0.0003

MATRIX : BEA INVERSE

COLUMN / ROW	11	12	13	14	15	16	17	18	19	20
53	0.0103	0.0062	0.0092	0.0010	0.0007	0.0013	0.0012	0.0009	0.0011	0.0012
54	0.0031	0.0053	0.0003	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
55	0.0186	0.0102	0.0018	0.0006	0.0002	0.0004	0.0004	0.0005	0.0004	0.0030
56	0.0018	0.0015	0.0549	0.0003	0.0002	0.0003	0.0003	0.0003	0.0004	0.0003
57	0.0011	0.0009	0.0294	0.0005	0.0003	0.0004	0.0004	0.0004	0.0005	0.0004
58	0.0020	0.0015	0.0050	0.0010	0.0005	0.0006	0.0005	0.0004	0.0005	0.0009
59	0.0037	0.0034	0.0022	0.0025	0.0009	0.0014	0.0013	0.0011	0.0013	0.0022
60	0.0007	0.0005	0.1551	0.0006	0.0002	0.0004	0.0004	0.0003	0.0004	0.0005
61	0.0008	0.0005	0.0006	0.0007	0.0002	0.0005	0.0005	0.0004	0.0004	0.0022
62	0.0048	0.0046	0.0118	0.0005	0.0003	0.0007	0.0007	0.0010	0.0009	0.0038
63	0.0009	0.0005	0.0050	0.0009	0.0009	0.0007	0.0007	0.0009	0.0008	0.0006
64	0.0031	0.0053	0.0017	0.0013	0.0009	0.0020	0.0140	0.0267	0.0052	0.0013
65	0.0705	0.0516	0.0310	0.0755	0.0218	0.0535	0.0587	0.0367	0.0478	0.0691
66	0.0098	0.0089	0.0161	0.0095	0.0042	0.0085	0.0091	0.0104	0.0108	0.0076
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
68	0.0257	0.0201	0.0211	0.0260	0.0105	0.0370	0.0310	0.0233	0.0303	0.0229
69	0.1154	0.1096	0.0457	0.0820	0.0296	0.0842	0.1041	0.0825	0.1063	0.0565
70	0.0203	0.0195	0.0144	0.0223	0.0110	0.0188	0.0182	0.0178	0.0210	0.0208
71	0.0301	0.0275	0.0210	0.0467	0.0305	0.0394	0.0345	0.0373	0.0387	0.0280
72	0.0030	0.0027	0.0057	0.0051	0.0038	0.0027	0.0032	0.0027	0.0039	0.0018
73	0.0723	0.0350	0.0444	0.0654	0.0734	0.0425	0.0427	0.0405	0.0427	0.0334
74	0.0077	0.0082	0.0041	0.0085	0.0029	0.0044	0.0042	0.0036	0.0043	0.0071
75	0.0020	0.0012	0.0015	0.0018	0.0019	0.0013	0.0013	0.0013	0.0014	0.0011
76	0.0020	0.0021	0.0026	0.0040	0.0009	0.0015	0.0019	0.0016	0.0018	0.0014
77	0.0038	0.0028	0.0046	0.0040	0.0047	0.0038	0.0041	0.0059	0.0052	0.0028
78	0.0009	0.0008	0.0004	0.0008	0.0002	0.0006	0.0006	0.0004	0.0006	0.0006
79	2.1228	1.8051	1.8844	2.5261	1.9386	2.5412	2.4074	2.4269	2.5760	2.0661

MATRIX : BEA INVERSE

COLUMN	21	22	23	24	25	26	27	28	29	30
ROW										
1	0.0056	0.0082	0.0054	0.0073	0.0043	0.0052	0.0091	0.0061	0.0178	0.0195
2	0.0048	0.0149	0.0050	0.0064	0.0037	0.0044	0.0076	0.0050	0.0130	0.0133
3	0.0495	0.0185	0.0110	0.0099	0.0044	0.0024	0.0031	0.0018	0.0015	0.0014
4	0.0030	0.0019	0.0010	0.0010	0.0006	0.0005	0.0007	0.0005	0.0010	0.0011
5	0.0060	0.0031	0.0076	0.0010	0.0010	0.0007	0.0083	0.0034	0.0021	0.0040
6	0.0010	0.0025	0.0031	0.0011	0.0014	0.0008	0.0095	0.0039	0.0017	0.0039
7	0.0041	0.0035	0.0055	0.0109	0.0056	0.0032	0.0095	0.0093	0.0033	0.0048
8	0.0089	0.0086	0.0083	0.0139	0.0129	0.0082	0.0512	0.0295	0.0131	0.0371
9	0.0012	0.0013	0.0024	0.0065	0.0031	0.0017	0.0041	0.0022	0.0021	0.0042
10	0.0004	0.0008	0.0007	0.0025	0.0016	0.0012	0.0220	0.0088	0.0033	0.0056
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0141	0.0128	0.0127	0.0148	0.0142	0.0149	0.0204	0.0171	0.0137	0.0166
13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
14	0.0095	0.0111	0.0090	0.0213	0.0120	0.0146	0.0232	0.0168	0.0505	0.0672
15	0.0004	0.0005	0.0004	0.0003	0.0003	0.0007	0.0004	0.0004	0.0007	0.0008
16	0.0034	0.0937	0.0132	0.0139	0.0069	0.0043	0.0023	0.0030	0.0036	0.0022
17	0.0028	0.0361	0.0226	0.0043	0.0021	0.0031	0.0009	0.0015	0.0022	0.0009
18	0.0038	0.0035	0.0028	0.0017	0.0022	0.0006	0.0011	0.0012	0.0011	0.0012
19	0.0003	0.0014	0.0009	0.0006	0.0004	0.0003	0.0014	0.0007	0.0005	0.0006
20	0.4805	0.2046	0.1196	0.1084	0.0475	0.0253	0.0092	0.0094	0.0076	0.0054
21	1.0328	0.0005	0.0006	0.0002	0.0002	0.0001	0.0005	0.0005	0.0006	0.0007
22	0.0001	1.0181	0.0028	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
23	0.0000	0.0002	1.0224	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000
24	0.0107	0.0192	0.0200	1.2370	0.5117	0.2293	0.0268	0.0582	0.0419	0.0234
25	0.0067	0.0198	0.0225	0.0361	1.0460	0.0130	0.0105	0.0132	0.0325	0.0152
26	0.0035	0.0043	0.0044	0.0075	0.0081	1.1303	0.0047	0.0045	0.0142	0.0080
27	0.0163	0.0376	0.0284	0.0696	0.0572	0.0511	1.2381	0.3815	0.1253	0.2795
28	0.0036	0.0312	0.0180	0.0233	0.0186	0.0094	0.0071	1.0238	0.0097	0.0922
29	0.0009	0.0015	0.0011	0.0021	0.0014	0.0013	0.0030	0.0045	1.0619	0.0064
30	0.0040	0.0256	0.0217	0.0017	0.0015	0.0028	0.0029	0.0018	0.0027	1.0034
31	0.0145	0.0123	0.0119	0.0195	0.0201	0.0112	0.0238	0.0178	0.0143	0.0572
32	0.0039	0.0671	0.0554	0.0176	0.0097	0.0102	0.0042	0.0049	0.0373	0.0042
33	0.0007	0.0016	0.0017	0.0004	0.0003	0.0002	0.0004	0.0003	0.0002	0.0003
34	0.0002	0.0002	0.0002	0.0001	0.0001	0.0002	0.0001	0.0001	0.0002	0.0002
35	0.0014	0.0088	0.0242	0.0009	0.0007	0.0008	0.0019	0.0012	0.0217	0.0016
36	0.0043	0.0034	0.0121	0.0038	0.0022	0.0016	0.0043	0.0023	0.0036	0.0048
37	0.1164	0.0524	0.1439	0.0107	0.0128	0.0068	0.0287	0.0147	0.0224	0.0458
38	0.0098	0.0272	0.0340	0.0071	0.0108	0.0054	0.0259	0.0120	0.0092	0.0251
39	0.0014	0.0027	0.0022	0.0017	0.0012	0.0012	0.0136	0.0083	0.0245	0.0658
40	0.0007	0.0006	0.0007	0.0007	0.0006	0.0006	0.0011	0.0007	0.0006	0.0007
41	0.0037	0.0042	0.0140	0.0010	0.0009	0.0008	0.0014	0.0009	0.0053	0.0017
42	0.0194	0.0750	0.0473	0.0193	0.0127	0.0066	0.0105	0.0060	0.0115	0.0055
43	0.0006	0.0006	0.0007	0.0007	0.0006	0.0005	0.0012	0.0008	0.0009	0.0008
44	0.0003	0.0003	0.0003	0.0002	0.0002	0.0002	0.0002	0.0002	0.0006	0.0003
45	0.0004	0.0004	0.0006	0.0008	0.0005	0.0003	0.0019	0.0010	0.0005	0.0009
46	0.0010	0.0006	0.0006	0.0009	0.0006	0.0004	0.0011	0.0007	0.0004	0.0006
47	0.0010	0.0016	0.0021	0.0008	0.0007	0.0005	0.0012	0.0007	0.0009	0.0008
48	0.0063	0.0020	0.0012	0.0042	0.0039	0.0037	0.0117	0.0049	0.0020	0.0032
49	0.0017	0.0014	0.0025	0.0035	0.0019	0.0012	0.0026	0.0015	0.0010	0.0014
50	0.0014	0.0011	0.0038	0.0006	0.0005	0.0005	0.0013	0.0007	0.0008	0.0010
51	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0007	0.0003
52	0.0003	0.0003	0.0007	0.0003	0.0003	0.0003	0.0004	0.0003	0.0007	0.0004

MATRIX : BEA INVERSE

COLUMN / ROW	21	22	23	24	25	26	27	28	29	30
53	0.0018	0.0017	0.0031	0.0012	0.0010	0.0010	0.0034	0.0017	0.0018	0.0018
54	0.0002	0.0002	0.0002	0.0002	0.0002	0.0003	0.0002	0.0002	0.0003	0.0003
55	0.0014	0.0009	0.0020	0.0006	0.0004	0.0004	0.0006	0.0005	0.0008	0.0005
56	0.0004	0.0004	0.0006	0.0003	0.0003	0.0006	0.0004	0.0003	0.0005	0.0005
57	0.0005	0.0006	0.0011	0.0004	0.0004	0.0005	0.0005	0.0004	0.0009	0.0006
58	0.0008	0.0006	0.0008	0.0005	0.0005	0.0005	0.0005	0.0004	0.0006	0.0005
59	0.0023	0.0019	0.0022	0.0015	0.0014	0.0015	0.0017	0.0013	0.0014	0.0016
60	0.0007	0.0006	0.0007	0.0005	0.0005	0.0005	0.0005	0.0004	0.0004	0.0005
61	0.0014	0.0008	0.0006	0.0007	0.0006	0.0004	0.0006	0.0005	0.0005	0.0006
62	0.0011	0.0010	0.0017	0.0006	0.0006	0.0006	0.0005	0.0005	0.0016	0.0005
63	0.0007	0.0009	0.0008	0.0008	0.0008	0.0103	0.0007	0.0007	0.0018	0.0009
64	0.0018	0.0026	0.0022	0.0012	0.0012	0.0032	0.0012	0.0011	0.0022	0.0016
65	0.0961	0.0587	0.0547	0.0732	0.0737	0.0459	0.0653	0.0577	0.0505	0.0664
66	0.0094	0.0109	0.0122	0.0081	0.0101	0.0176	0.0091	0.0095	0.0119	0.0117
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000
68	0.0279	0.0252	0.0283	0.0451	0.0321	0.0229	0.0664	0.0456	0.0262	0.0338
69	0.0630	0.0787	0.0697	0.0615	0.0557	0.0488	0.0581	0.0602	0.0650	0.0846
70	0.0199	0.0227	0.0264	0.0172	0.0155	0.0191	0.0187	0.0179	0.0188	0.0209
71	0.0304	0.0433	0.0353	0.0257	0.0300	0.0787	0.0344	0.0303	0.0369	0.0374
72	0.0032	0.0033	0.0031	0.0037	0.0046	0.0061	0.0034	0.0034	0.0081	0.0082
73	0.0330	0.0465	0.0420	0.0382	0.0419	0.0539	0.0490	0.0546	0.1798	0.0601
74	0.0066	0.0049	0.0047	0.0040	0.0042	0.0048	0.0040	0.0036	0.0042	0.0046
75	0.0012	0.0015	0.0013	0.0012	0.0013	0.0019	0.0015	0.0016	0.0045	0.0021
76	0.0015	0.0017	0.0019	0.0013	0.0015	0.0029	0.0015	0.0015	0.0019	0.0020
77	0.0033	0.0043	0.0045	0.0034	0.0036	0.0152	0.0037	0.0035	0.0077	0.0048
78	0.0006	0.0005	0.0005	0.0008	0.0006	0.0007	0.0009	0.0008	0.0006	0.0006
79	2.1767	2.1632	2.0340	1.9909	2.1337	1.9215	1.9420	1.9868	2.0162	2.1883

MATRIX ': BEA INVERSE

COLUMN / ROW	31	32	33	34	35	36	37	38	39	40
1	0.0029	0.0074	0.2027	0.0426	0.0027	0.0030	0.0018	0.0022	0.0034	0.0028
2	0.0025	0.0091	0.0984	0.0286	0.0025	0.0038	0.0015	0.0021	0.0027	0.0025
3	0.0006	0.0013	0.0024	0.0025	0.0036	0.0010	0.0006	0.0007	0.0007	0.0010
4	0.0004	0.0007	0.0077	0.0021	0.0004	0.0004	0.0002	0.0003	0.0003	0.0003
5	0.0009	0.0018	0.0010	0.0009	0.0011	0.0039	0.0632	0.0038	0.0264	0.0174
6	0.0010	0.0019	0.0008	0.0008	0.0016	0.0013	0.0046	0.1167	0.0041	0.0115
7	0.0026	0.0049	0.0054	0.0027	0.0045	0.0148	0.0311	0.0048	0.0140	0.0098
8	0.4860	0.0126	0.0125	0.0072	-0.0113	0.0166	0.0121	0.0123	0.0100	0.0093
9	0.0049	0.0029	0.0014	0.0009	0.0169	0.0895	0.0048	0.0031	0.0027	0.0024
10	0.0009	0.0029	0.0020	0.0009	0.0019	0.0022	0.0013	0.0008	0.0009	0.0007
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0509	0.0130	0.0157	0.0106	0.0149	0.0175	0.0193	0.0150	0.0146	0.0138
13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
14	0.0069	0.0109	0.4101	0.0811	0.0068	0.0076	0.0047	0.0058	0.0085	0.0079
15	0.0003	0.0004	0.0003	0.0004	0.0004	0.0004	0.0003	0.0003	0.0004	0.0005
16	0.0008	0.0435	0.0024	0.0682	0.0034	0.0065	0.0015	0.0038	0.0018	0.0025
17	0.0005	0.0422	0.0017	0.0424	0.0018	0.0038	0.0007	0.0022	0.0008	0.0016
18	0.0005	0.0027	0.0007	0.0086	0.0022	0.0019	0.0016	0.0014	0.0018	0.0022
19	0.0002	0.0015	0.0011	0.0111	0.0003	0.0029	0.0002	0.0003	0.0002	0.0004
20	0.0048	0.0099	0.0061	0.0222	0.0365	0.0096	0.0056	0.0071	0.0067	0.0087
21	0.0001	0.0006	0.0016	0.0012	0.0044	0.0004	0.0003	0.0004	0.0003	0.0014
22	0.0000	0.0001	0.0000	0.0001	0.0001	0.0000	0.0000	0.0001	0.0000	0.0001
23	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
24	0.0137	0.0305	0.0209	0.0279	0.0329	0.0308	0.0064	0.0094	0.0244	0.0121
25	0.0049	0.0224	0.0145	0.0245	0.0533	0.0079	0.0027	0.0034	0.0218	0.0087
26	0.0038	0.0041	0.0075	0.0053	0.0038	0.0037	0.0031	0.0029	0.0445	0.0040
27	0.0447	0.1321	0.0716	0.0390	0.0704	0.0380	0.0337	0.0359	0.0333	0.0259
28	0.0018	0.1849	0.0058	0.0347	0.0073	0.0143	0.0023	0.0166	0.0071	0.0052
29	0.0034	0.0019	0.0550	0.0130	0.0009	0.0038	0.0006	0.0007	0.0016	0.0015
30	0.0029	0.0023	0.0014	0.0013	0.0033	0.0013	0.0015	0.0013	0.0295	0.0121
31	1.0911	0.0114	0.0184	0.0096	0.0110	0.0206	0.0171	0.0167	0.0145	0.0137
32	0.0033	1.0513	0.0079	0.0995	0.0271	0.0140	0.0045	0.0056	0.0068	0.0063
33	0.0002	0.0007	1.2287	0.2198	0.0002	0.0006	0.0004	0.0003	0.0003	0.0003
34	0.0001	0.0002	0.0003	1.0300	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002
35	0.0007	0.0035	0.0061	0.0024	1.0698	0.0008	0.0006	0.0008	0.0006	0.0096
36	0.0057	0.0034	0.0028	0.0016	0.0303	1.1277	0.0041	0.0060	0.0028	0.0055
37	0.0120	0.0182	0.0115	0.0116	0.0124	0.0307	1.2688	0.0247	0.5274	0.3189
38	0.0083	0.0113	0.0045	0.0070	0.0139	0.0113	0.0475	1.5345	0.0466	0.1385
39	0.0077	0.0029	0.0110	0.0028	0.0013	0.0010	0.0007	0.0008	1.0031	0.0014
40	0.0024	0.0006	0.0006	0.0004	0.0011	0.0022	0.0009	0.0008	0.0007	1.0220
41	0.0008	0.0024	0.0023	0.0014	0.0013	0.0017	0.0090	0.0052	0.0120	0.0194
42	0.0036	0.0095	0.0064	0.0133	0.0044	0.0159	0.0229	0.0099	0.0131	0.0460
43	0.0013	0.0006	0.0005	0.0004	0.0008	0.0031	0.0017	0.0017	0.0010	0.0017
44	0.0002	0.0002	0.0011	0.0004	0.0001	0.0002	0.0002	0.0001	0.0002	0.0002
45	0.0016	0.0006	0.0005	0.0003	0.0010	0.0089	0.0026	0.0029	0.0013	0.0013
46	0.0006	0.0006	0.0005	0.0005	0.0007	0.0027	0.0010	0.0010	0.0006	0.0008
47	0.0006	0.0015	0.0005	0.0006	0.0018	0.0027	0.0031	0.0098	0.0033	0.0078
48	0.0006	0.0028	0.0011	0.0014	0.0011	0.0007	0.0017	0.0011	0.0012	0.0010
49	0.0020	0.0012	0.0010	0.0007	0.0011	0.0041	0.0085	0.0062	0.0041	0.0108
50	0.0005	0.0015	0.0005	0.0005	0.0006	0.0014	0.0106	0.0152	0.0051	0.0050
51	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0003
52	0.0005	0.0003	0.0003	0.0003	0.0003	0.0004	0.0012	0.0004	0.0007	0.0084

MATRIX : BEA INVERSE

COLUMN / ROW	31	32	33	34	35	36	37	38	39	40
53	0.0046	0.0014	0.0009	0.0010	0.0013	0.0022	0.0094	0.0046	0.0045	0.0187
54	0.0003	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0004
55	0.0007	0.0004	0.0005	0.0004	0.0005	0.0023	0.0007	0.0011	0.0005	0.0009
56	0.0005	0.0006	0.0003	0.0004	0.0003	0.0004	0.0004	0.0005	0.0006	0.0009
57	0.0011	0.0008	0.0004	0.0006	0.0005	0.0005	0.0006	0.0010	0.0006	0.0016
58	0.0005	0.0004	0.0006	0.0004	0.0004	0.0009	0.0007	0.0011	0.0006	0.0010
59	0.0016	0.0017	0.0016	0.0012	0.0013	0.0038	0.0041	0.0057	0.0026	0.0038
60	0.0006	0.0011	0.0004	0.0004	0.0004	0.0007	0.0007	0.0005	0.0015	0.0015
61	0.0006	0.0004	0.0005	0.0004	0.0005	0.0008	0.0008	0.0006	0.0006	0.0014
62	0.0006	0.0007	0.0006	0.0012	0.0007	0.0007	0.0017	0.0008	0.0011	0.0077
63	0.0006	0.0008	0.0008	0.0011	0.0007	0.0007	0.0006	0.0005	0.0010	0.0010
64	0.0010	0.0035	0.0012	0.0199	0.0030	0.0030	0.0026	0.0019	0.0018	0.0020
65	0.0786	0.0492	0.0582	0.0409	0.0489	0.0898	0.0851	0.0575	0.0734	0.0592
66	0.0056	0.0088	0.0090	0.0099	0.0077	0.0099	0.0094	0.0087	0.0087	0.0127
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
68	0.0391	0.0333	0.0313	0.0211	0.0646	0.0607	0.0519	0.0574	0.0372	0.0346
69	0.0424	0.0616	0.0867	0.0710	0.0584	0.0503	0.0557	0.0635	0.0656	0.0664
70	0.0269	0.0159	0.0224	0.0188	0.0173	0.0210	0.0215	0.0187	0.0227	0.0202
71	0.1295	0.0268	0.0427	0.0303	0.0245	0.0266	0.0232	0.0239	0.0286	0.0317
72	0.0020	0.0040	0.0032	0.0031	0.0031	0.0029	0.0022	0.0021	0.0031	0.0061
73	0.0446	0.0493	0.0516	0.0523	0.0416	0.0415	0.0335	0.0316	0.0454	0.0409
74	0.0049	0.0034	0.0055	0.0037	0.0035	0.0071	0.0039	0.0034	0.0038	0.0042
75	0.0013	0.0015	0.0015	0.0016	0.0013	0.0013	0.0010	0.0010	0.0014	0.0014
76	0.0012	0.0015	0.0029	0.0018	0.0012	0.0016	0.0013	0.0012	0.0014	0.0018
77	0.0036	0.0037	0.0041	0.0066	0.0036	0.0035	0.0030	0.0029	0.0036	0.0038
78	0.0005	0.0006	0.0009	0.0005	0.0005	0.0007	0.0007	0.0006	0.0005	0.0005
79	2.1797	1.9450	2.5855	2.1743	1.7558	1.8707	1.9279	2.1887	2.2193	2.1098

MATRIX .: BEA INVERSE

COLUMN / ROW	41	42	43	44	45	46	47	48	49	50
1	0.0024	0.0032	0.0024	0.0036	0.0025	0.0028	0.0025	0.0030	0.0029	0.0027
2	0.0022	0.0028	0.0021	0.0028	0.0023	0.0026	0.0023	0.0027	0.0025	0.0025
3	0.0015	0.0015	0.0006	0.0009	0.0006	0.0006	0.0006	0.0010	0.0007	0.0006
4	0.0003	0.0004	0.0003	0.0004	0.0003	0.0003	0.0003	0.0004	0.0003	0.0003
5	0.0153	0.0131	0.0095	0.0122	0.0133	0.0104	0.0080	0.0088	0.0099	0.0077
6	0.0088	0.0121	0.0077	0.0039	0.0042	0.0050	0.0054	0.0057	0.0069	0.0071
7	0.0088	0.0081	0.0068	0.0079	0.0081	0.0065	0.0053	0.0055	0.0062	0.0050
8	0.0090	0.0096	0.0083	0.0080	0.0079	0.0082	0.0075	0.0091	0.0088	0.0068
9	0.0021	0.0027	0.0021	0.0019	0.0020	0.0017	0.0028	0.0017	0.0023	0.0024
10	0.0007	0.0009	0.0004	0.0006	0.0005	0.0005	0.0004	0.0005	0.0005	0.0004
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0122	0.0123	0.0107	0.0113	0.0115	0.0116	0.0107	0.0121	0.0110	0.0123
13	0.0002	0.0001	0.0003	0.0001	0.0000	0.0001	0.0000	0.0001	0.0000	0.0000
14	0.0064	0.0078	0.0067	0.0091	0.0069	0.0073	0.0071	0.0076	0.0074	0.0076
15	0.0004	0.0005	0.0005	0.0005	0.0004	0.0005	0.0005	0.0005	0.0005	0.0005
16	0.0029	0.0047	0.0025	0.0032	0.0030	0.0050	0.0027	0.0037	0.0026	0.0039
17	0.0017	0.0071	0.0013	0.0020	0.0020	0.0025	0.0015	0.0019	0.0014	0.0011
18	0.0022	0.0022	0.0020	0.0021	0.0020	0.0020	0.0023	0.0021	0.0020	0.0027
19	0.0007	0.0005	0.0005	0.0006	0.0008	0.0006	0.0005	0.0004	0.0006	0.0004
20	0.0153	0.0137	0.0061	0.0087	0.0057	0.0054	0.0054	0.0099	0.0068	0.0050
21	0.0008	0.0008	0.0007	0.0009	0.0007	0.0004	0.0004	0.0006	0.0007	0.0008
22	0.0001	0.0001	0.0006	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
23	0.0000	0.0001	0.0002	0.0008	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
24	0.0171	0.0162	0.0099	0.0110	0.0088	0.0099	0.0092	0.0089	0.0102	0.0098
25	0.0141	0.0139	0.0074	0.0075	0.0052	0.0056	0.0056	0.0046	0.0062	0.0072
26	0.0037	0.0039	0.0039	0.0046	0.0039	0.0043	0.0037	0.0040	0.0039	0.0037
27	0.0278	0.0368	0.0166	0.0211	0.0189	0.0205	0.0166	0.0185	0.0182	0.0150
28	0.0114	0.0084	0.0045	0.0075	0.0070	0.0092	0.0052	0.0073	0.0047	0.0041
29	0.0014	0.0013	0.0009	0.0012	0.0009	0.0009	0.0010	0.0014	0.0009	0.0011
30	0.0072	0.0090	0.0021	0.0071	0.0050	0.0055	0.0024	0.0024	0.0026	0.0014
31	0.0132	0.0121	0.0133	0.0121	0.0118	0.0128	0.0116	0.0153	0.0142	0.0098
32	0.0169	0.0176	0.0100	0.0270	0.0277	0.0379	0.0102	0.0167	0.0109	0.0082
33	0.0003	0.0006	0.0004	0.0062	0.0005	0.0004	0.0003	0.0015	0.0009	0.0003
34	0.0001	0.0013	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
35	0.0014	0.0020	0.0013	0.0013	0.0013	0.0017	0.0010	0.0013	0.0014	0.0011
36	0.0067	0.0118	0.0130	0.0078	0.0077	0.0057	0.0156	0.0064	0.0122	0.0147
37	0.2777	0.1898	0.1788	0.2343	0.2570	0.2018	0.1460	0.1599	0.1845	0.1434
38	0.1067	0.1291	0.0967	0.0458	0.0484	0.0597	0.0585	0.0647	0.0828	0.0861
39	0.0011	0.0013	0.0006	0.0010	0.0008	0.0009	0.0006	0.0007	0.0007	0.0006
40	0.0009	0.0011	0.0036	0.0019	0.0117	0.0075	0.0054	0.0200	0.0092	0.0012
41	1.0260	0.0145	0.0329	0.0370	0.0203	0.0219	0.0160	0.0144	0.0135	0.0120
42	0.0206	1.0481	0.0235	0.0251	0.0323	0.0253	0.0156	0.0265	0.0314	0.0294
43	0.0016	0.0011	1.0895	0.0529	0.0353	0.0125	0.0013	0.0093	0.0056	0.0008
44	0.0004	0.0002	0.0008	1.0501	0.0015	0.0004	0.0003	0.0004	0.0002	0.0002
45	0.0010	0.0012	0.0014	0.0012	1.0427	0.0028	0.0008	0.0013	0.0012	0.0007
46	0.0007	0.0008	0.0040	0.0008	0.0015	1.0705	0.0013	0.0010	0.0011	0.0007
47	0.0113	0.0130	0.0373	0.0227	0.0401	0.0246	1.0835	0.0273	0.0245	0.0428
48	0.0017	0.0011	0.0009	0.0009	0.0009	0.0017	0.0012	1.0642	0.0016	0.0006
49	0.0054	0.0058	0.0429	0.1015	0.0729	0.0647	0.0432	0.0574	1.0862	0.0072
50	0.0045	0.0043	0.0381	0.0363	0.0106	0.0255	0.0032	0.0066	0.0048	1.1150
51	0.0002	0.0006	0.0004	0.0004	0.0008	0.0009	0.0024	0.0019	0.0015	0.0003
52	0.0008	0.0008	0.0007	0.0008	0.0009	0.0013	0.0009	0.0009	0.0017	0.0005

MATRIX : BEA INVERSE

COLUMN / ROW	41	42	43	44	45	46	47	48	49	50
53	0.0047	0.0085	0.0192	0.0103	0.0208	0.0480	0.0329	0.0381	0.0300	0.0072
54	0.0002	0.0003	0.0004	0.0016	0.0003	0.0003	0.0004	0.0004	0.0004	0.0003
55	0.0011	0.0009	0.0014	0.0050	0.0010	0.0012	0.0011	0.0011	0.0016	0.0008
56	0.0011	0.0008	0.0044	0.0011	0.0010	0.0008	0.0007	0.0009	0.0012	0.0009
57	0.0015	0.0018	0.0066	0.0022	0.0018	0.0026	0.0024	0.0027	0.0043	0.0019
58	0.0010	0.0008	0.0195	0.0122	0.0030	0.0043	0.0008	0.0012	0.0016	0.0069
59	0.0164	0.0055	0.0122	0.0198	0.0192	0.0138	0.0097	0.0055	0.0120	0.0048
60	0.0013	0.0016	0.0093	0.0012	0.0019	0.0009	0.0014	0.0010	0.0019	0.0019
61	0.0005	0.0006	0.0019	0.0014	0.0010	0.0006	0.0004	0.0009	0.0008	0.0007
62	0.0017	0.0017	0.0054	0.0033	0.0023	0.0021	0.0020	0.0035	0.0087	0.0024
63	0.0007	0.0008	0.0009	0.0010	0.0008	0.0008	0.0007	0.0008	0.0008	0.0008
64	0.0018	0.0036	0.0016	0.0022	0.0017	0.0018	0.0020	0.0017	0.0018	0.0016
65	0.0523	0.0505	0.0448	0.0552	0.0492	0.0491	0.0378	0.0416	0.0426	0.0410
66	0.0107	0.0099	0.0106	0.0105	0.0105	0.0120	0.0102	0.0108	0.0111	0.0100
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
68	0.0336	0.0348	0.0269	0.0285	0.0292	0.0261	0.0266	0.0252	0.0285	0.0279
69	0.0530	0.0598	0.0653	0.0741	0.0666	0.0704	0.0552	0.0655	0.0599	0.0518
70	0.0198	0.0194	0.0154	0.0217	0.0237	0.0199	0.0177	0.0197	0.0165	0.0206
71	0.0273	0.0275	0.0192	0.0238	0.0237	0.0287	0.0243	0.0445	0.0241	0.0296
72	0.0031	0.0035	0.0038	0.0042	0.0037	0.0038	0.0040	0.0038	0.0037	0.0039
73	0.0379	0.0410	0.0406	0.0525	0.0386	0.0417	0.0377	0.0376	0.0395	0.0387
74	0.0037	0.0037	0.0041	0.0043	0.0042	0.0045	0.0035	0.0037	0.0039	0.0034
75	0.0012	0.0014	0.0014	0.0016	0.0013	0.0014	0.0013	0.0013	0.0013	0.0014
76	0.0015	0.0016	0.0018	0.0018	0.0018	0.0021	0.0017	0.0020	0.0019	0.0018
77	0.0035	0.0037	0.0038	0.0046	0.0040	0.0044	0.0038	0.0042	0.0040	0.0038
78	0.0005	0.0005	0.0006	0.0005	0.0005	0.0005	0.0004	0.0004	0.0005	0.0004
79	1.9560	1.9361	2.0290	2.1538	2.0631	2.0522	1.8080	1.9405	1.9138	1.8501

MATRIX : BEA INVERSE

COLUMN / ROW	51	52	53	54	55	56	57	58	59	60
1	0.0029	0.0035	0.0030	0.0035	0.0033	0.0028	0.0033	0.0029	0.0030	0.0028
2	0.0025	0.0031	0.0027	0.0034	0.0029	0.0026	0.0029	0.0028	0.0037	0.0026
3	0.0005	0.0011	0.0007	0.0011	0.0008	0.0008	0.0008	0.0006	0.0007	0.0005
4	0.0003	0.0004	0.0003	0.0004	0.0004	0.0003	0.0003	0.0003	0.0004	0.0003
5	0.0024	0.0082	0.0061	0.0079	0.0079	0.0022	0.0031	0.0041	0.0106	0.0035
6	0.0033	0.0094	0.0102	0.0084	0.0119	0.0048	0.0072	0.0155	0.0051	0.0075
7	0.0023	0.0057	0.0046	0.0060	0.0049	0.0022	0.0031	0.0038	0.0070	0.0029
8	0.0049	0.0085	0.0088	0.0087	0.0120	0.0057	0.0077	0.0078	0.0080	0.0067
9	0.0012	0.0023	0.0022	0.0027	0.0029	0.0010	0.0022	0.0020	0.0021	0.0012
10	0.0003	0.0007	0.0006	0.0008	0.0008	0.0004	0.0008	0.0009	0.0006	0.0004
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0094	0.0119	0.0107	0.0115	0.0110	0.0084	0.0110	0.0095	0.0123	0.0092
13	0.0001	0.0001	0.0003	0.0001	0.0000	0.0028	0.0002	0.0001	0.0001	0.0009
14	0.0085	0.0083	0.0083	0.0091	0.0085	0.0079	0.0095	0.0077	0.0061	0.0082
15	0.0006	0.0005	0.0005	0.0005	0.0005	0.0006	0.0006	0.0005	0.0003	0.0006
16	0.0024	0.0048	0.0042	0.0077	0.0042	0.0041	0.0034	0.0055	0.0129	0.0036
17	0.0018	0.0043	0.0025	0.0039	0.0050	0.0019	0.0019	0.0031	0.0096	0.0015
18	0.0016	0.0021	0.0021	0.0021	0.0022	0.0020	0.0026	0.0020	0.0019	0.0020
19	0.0003	0.0008	0.0004	0.0006	0.0005	0.0002	0.0003	0.0009	0.0167	0.0003
20	0.0041	0.0104	0.0064	0.0105	0.0073	0.0077	0.0067	0.0053	0.0062	0.0042
21	0.0006	0.0037	0.0008	0.0021	0.0008	0.0008	0.0008	0.0008	0.0006	0.0006
22	0.0004	0.0001	0.0004	0.0002	0.0001	0.0170	0.0011	0.0006	0.0001	0.0010
23	0.0001	0.0000	0.0000	0.0001	0.0000	0.0001	0.0000	0.0000	0.0001	0.0033
24	0.0124	0.0158	0.0185	0.0217	0.0199	0.0149	0.0282	0.0140	0.0096	0.0091
25	0.0046	0.0134	0.0078	0.0201	0.0248	0.0076	0.0122	0.0131	0.0059	0.0042
26	0.0041	0.0045	0.0055	0.0066	0.0039	0.0069	0.0046	0.0035	0.0034	0.0044
27	0.0138	0.0295	0.0262	0.0354	0.0324	0.0177	0.0387	0.0464	0.0236	0.0140
28	0.0064	0.0114	0.0111	0.0203	0.0206	0.0105	0.0135	0.0174	0.0131	0.0068
29	0.0008	0.0011	0.0009	0.0013	0.0010	0.0009	0.0010	0.0009	0.0009	0.0010
30	0.0019	0.0103	0.0053	0.0115	0.0071	0.0021	0.0028	0.0020	0.0092	0.0025
31	0.0075	0.0125	0.0135	0.0119	0.0199	0.0085	0.0103	0.0099	0.0119	0.0105
32	0.0204	0.0365	0.0222	0.0626	0.0349	0.0183	0.0266	0.0507	0.0410	0.0121
33	0.0002	0.0003	0.0003	0.0005	0.0002	0.0002	0.0002	0.0002	0.0003	0.0002
34	0.0002	0.0003	0.0002	0.0010	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
35	0.0040	0.0037	0.0034	0.0043	0.0386	0.0106	0.0352	0.0033	0.0160	0.0018
36	0.0031	0.0136	0.0141	0.0176	0.0135	0.0037	0.0108	0.0109	0.0072	0.0058
37	0.0393	0.1535	0.1119	0.1461	0.1052	0.0361	0.0491	0.0685	0.2029	0.0636
38	0.0405	0.1147	0.1225	0.1041	0.1394	0.0557	0.0873	0.1935	0.0610	0.0930
39	0.0006	0.0014	0.0010	0.0016	0.0012	0.0006	0.0010	0.0010	0.0012	0.0007
40	0.0007	0.0037	0.0034	0.0017	0.0009	0.0006	0.0007	0.0009	0.0011	0.0007
41	0.0219	0.0437	0.0211	0.0433	0.0322	0.0284	0.0348	0.0176	0.0562	0.0208
42	0.0204	0.0579	0.0296	0.0526	0.0296	0.0245	0.0249	0.0219	0.0525	0.0242
43	0.0006	0.0023	0.0055	0.0019	0.0009	0.0006	0.0007	0.0011	0.0057	0.0013
44	0.0002	0.0002	0.0002	0.0007	0.0002	0.0002	0.0002	0.0001	0.0002	0.0002
45	0.0004	0.0008	0.0008	0.0008	0.0008	0.0003	0.0005	0.0008	0.0008	0.0005
46	0.0003	0.0008	0.0006	0.0007	0.0005	0.0004	0.0006	0.0005	0.0006	0.0006
47	0.0110	0.0149	0.0174	0.0165	0.0117	0.0135	0.0125	0.0157	0.0260	0.0317
48	0.0004	0.0010	0.0007	0.0010	0.0012	0.0005	0.0008	0.0013	0.0008	0.0005
49	0.0083	0.0191	0.0140	0.0117	0.0038	0.0035	0.0035	0.0182	0.0150	0.0112
50	0.0013	0.0042	0.0045	0.0050	0.0029	0.0056	0.0021	0.0039	0.0195	0.0546
51	1.2016	0.0011	0.0003	0.0026	0.0003	0.0040	0.0005	0.0003	0.0004	0.0005
52	0.0006	1.0625	0.0015	0.0229	0.0007	0.0006	0.0006	0.0015	0.0084	0.0005

MATRIX : BEA INVERSE

COLUMN	51	52	53	54	55	56	57	58	59	60
ROW										
53	0.0201	0.0870	1.0792	0.0570	0.0271	0.0227	0.0086	0.0224	0.0067	0.0072
54	0.0002	0.0019	0.0007	1.0151	0.0003	0.0002	0.0003	0.0004	0.0002	0.0003
55	0.0105	0.0075	0.0087	0.0121	1.0350	0.0101	0.0063	0.0104	0.0078	0.0020
56	0.0025	0.0014	0.0034	0.0013	0.0008	1.0692	0.0058	0.0027	0.0050	0.0456
57	0.0813	0.0038	0.0237	0.0048	0.0032	0.1756	1.0610	0.0115	0.0032	0.0224
58	0.0010	0.0126	0.0032	0.0017	0.0326	0.0027	0.0015	1.0464	0.0139	0.0039
59	0.0042	0.0163	0.0054	0.0089	0.0065	0.0020	0.0021	0.0221	1.4977	0.0033
60	0.0007	0.0026	0.0017	0.0022	0.0005	0.0058	0.0012	0.0005	0.0009	1.1900
61	0.0003	0.0006	0.0011	0.0007	0.0005	0.0003	0.0003	0.0004	0.0005	0.0004
62	0.0013	0.0198	0.0045	0.0250	0.0014	0.0022	0.0017	0.0029	0.0102	0.0199
63	0.0007	0.0009	0.0008	0.0012	0.0008	0.0012	0.0010	0.0010	0.0009	0.0043
64	0.0017	0.0049	0.0021	0.0123	0.0018	0.0017	0.0020	0.0021	0.0017	0.0017
65	0.0283	0.0492	0.0426	0.0515	0.0492	0.0306	0.0380	0.0428	0.0571	0.0342
66	0.0120	0.0115	0.0107	0.0108	0.0095	0.0124	0.0117	0.0089	0.0085	0.0146
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
68	0.0160	0.0292	0.0283	0.0313	0.0302	0.0191	0.0279	0.0283	0.0279	0.0229
69	0.0468	0.0821	0.0609	0.0765	0.0740	0.0608	0.0682	0.0715	0.0674	0.0487
70	0.0159	0.0171	0.0184	0.0173	0.0145	0.0131	0.0154	0.0142	0.0166	0.0136
71	0.0291	0.0271	0.0259	0.0282	0.0274	0.0273	0.0278	0.0229	0.0210	0.0210
72	0.0038	0.0035	0.0040	0.0039	0.0038	0.0038	0.0047	0.0036	0.0029	0.0068
73	0.0384	0.0468	0.0374	0.0819	0.0454	0.0491	0.0450	0.0365	0.0411	0.0462
74	0.0030	0.0043	0.0037	0.0040	0.0038	0.0038	0.0038	0.0039	0.0174	0.0040
75	0.0014	0.0015	0.0014	0.0023	0.0015	0.0016	0.0016	0.0013	0.0013	0.0016
76	0.0018	0.0019	0.0019	0.0017	0.0016	0.0023	0.0021	0.0015	0.0013	0.0025
77	0.0039	0.0044	0.0036	0.0057	0.0037	0.0045	0.0042	0.0033	0.0041	0.0042
78	0.0004	0.0005	0.0005	0.0006	0.0005	0.0004	0.0005	0.0005	0.0005	0.0004
79	1.8034	2.1632	1.9136	2.1776	2.0125	1.8757	1.8168	1.9577	2.5185	1.9626

MATRIX : BEA INVERSE

COLUMN / ROW	61	62	63	64	65	66	67	68	69	70
1	0.0037	0.0054	0.0030	0.0061	0.0031	0.0013	0.0054	0.0015	0.0046	0.0031
2	0.0036	0.0074	0.0027	0.0090	0.0025	0.0011	0.0040	0.0014	0.0034	0.0026
3	0.0048	0.0008	0.0008	0.0044	0.0004	0.0003	0.0003	0.0005	0.0005	0.0004
4	0.0006	0.0006	0.0003	0.0008	0.0004	0.0001	0.0004	0.0002	0.0018	0.0003
5	0.0114	0.0038	0.0020	0.0033	0.0009	0.0002	0.0002	0.0006	0.0003	0.0002
6	0.0061	0.0067	0.0051	0.0055	0.0005	0.0003	0.0002	0.0005	0.0003	0.0002
7	0.0072	0.0032	0.0037	0.0036	0.0019	0.0007	0.0009	0.0348	0.0014	0.0017
8	0.0083	0.0069	0.0077	0.0088	0.0249	0.0055	0.0040	0.0884	0.0092	0.0058
9	0.0020	0.0014	0.0014	0.0019	0.0011	0.0006	0.0004	0.0015	0.0006	0.0005
10	0.0006	0.0006	0.0017	0.0010	0.0002	0.0001	0.0001	0.0003	0.0002	0.0002
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0119	0.0107	0.0093	0.0121	0.0455	0.0333	0.0138	0.0763	0.0141	0.0165
13	0.0001	0.0003	0.0002	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000
14	0.0080	0.0150	0.0084	0.0119	0.0086	0.0036	0.0137	0.0041	0.0076	0.0088
15	0.0005	0.0007	0.0005	0.0005	0.0003	0.0003	0.0011	0.0003	0.0004	0.0006
16	0.0081	0.0249	0.0037	0.0312	0.0011	0.0005	0.0005	0.0007	0.0015	0.0008
17	0.0110	0.0037	0.0014	0.0125	0.0011	0.0002	0.0003	0.0004	0.0007	0.0004
18	0.0027	0.0028	0.0015	0.0036	0.0008	0.0005	0.0002	0.0006	0.0005	0.0002
19	0.0049	0.0006	0.0003	0.0008	0.0002	0.0001	0.0001	0.0002	0.0003	0.0001
20	0.0532	0.0073	0.0062	0.0411	0.0038	0.0024	0.0017	0.0052	0.0033	0.0036
21	0.0004	0.0009	0.0003	0.0007	0.0001	0.0000	0.0001	0.0001	0.0005	0.0001
22	0.0066	0.0013	0.0002	0.0027	0.0001	0.0002	0.0001	0.0000	0.0000	0.0000
23	0.0013	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
24	0.0118	0.0188	0.0392	0.0472	0.0060	0.0049	0.0068	0.0059	0.0167	0.0259
25	0.0048	0.0112	0.0110	0.0248	0.0016	0.0007	0.0011	0.0009	0.0065	0.0017
26	0.0037	0.0061	0.0041	0.0062	0.0050	0.0043	0.0074	0.0034	0.0060	0.0306
27	0.0211	0.0249	0.0923	0.0431	0.0083	0.0029	0.0070	0.0102	0.0060	0.0060
28	0.0116	0.0145	0.0102	0.0455	0.0023	0.0009	0.0009	0.0013	0.0021	0.0014
29	0.0010	0.0016	0.0009	0.0017	0.0007	0.0003	0.0008	0.0005	0.0011	0.0010
30	0.0076	0.0031	0.0011	0.0098	0.0025	0.0016	0.0008	0.0036	0.0009	0.0010
31	0.0125	0.0099	0.0079	0.0122	0.0511	0.0095	0.0050	0.0181	0.0153	0.0073
32	0.0215	0.0308	0.0190	0.0463	0.0081	0.0025	0.0018	0.0028	0.0038	0.0023
33	0.0004	0.0007	0.0005	0.0043	0.0001	0.0000	0.0001	0.0000	0.0001	0.0001
34	0.0002	0.0009	0.0018	0.0027	0.0001	0.0001	0.0005	0.0001	0.0002	0.0002
35	0.0061	0.0071	0.0151	0.0065	0.0009	0.0005	0.0005	0.0007	0.0009	0.0004
36	0.0089	0.0058	0.0047	0.0058	0.0023	0.0011	0.0007	0.0031	0.0013	0.0008
37	0.2135	0.0670	0.0265	0.0559	0.0156	0.0028	0.0023	0.0075	0.0043	0.0026
38	0.0743	0.0836	0.0584	0.0670	0.0061	0.0030	0.0019	0.0045	0.0028	0.0019
39	0.0011	0.0039	0.0014	0.0018	0.0008	0.0003	0.0005	0.0006	0.0006	0.0004
40	0.0418	0.0009	0.0004	0.0007	0.0017	0.0010	0.0005	0.0025	0.0005	0.0006
41	0.0133	0.0239	0.0065	0.0130	0.0015	0.0007	0.0005	0.0007	0.0009	0.0004
42	0.0397	0.0269	0.0114	0.0225	0.0055	0.0014	0.0011	0.0026	0.0021	0.0015
43	0.0301	0.0010	0.0005	0.0008	0.0023	0.0002	0.0003	0.0010	0.0004	0.0005
44	0.0005	0.0003	0.0002	0.0003	0.0001	0.0001	0.0002	0.0001	0.0002	0.0003
45	0.0025	0.0005	0.0005	0.0005	0.0004	0.0002	0.0001	0.0018	0.0002	0.0002
46	0.0009	0.0004	0.0004	0.0005	0.0003	0.0002	0.0001	0.0005	0.0001	0.0001
47	0.0106	0.0160	0.0017	0.0017	0.0014	0.0003	0.0002	0.0005	0.0005	0.0003
48	0.0009	0.0009	0.0012	0.0012	0.0002	0.0001	0.0002	0.0002	0.0003	0.0003
49	0.0484	0.0068	0.0013	0.0020	0.0015	0.0003	0.0002	0.0009	0.0005	0.0003
50	0.0106	0.0029	0.0019	0.0017	0.0013	0.0003	0.0002	0.0005	0.0004	0.0002
51	0.0007	0.0006	0.0002	0.0003	0.0002	0.0002	0.0003	0.0002	0.0003	0.0005
52	0.0034	0.0012	0.0007	0.0007	0.0005	0.0003	0.0003	0.0006	0.0003	0.0004

MATRIX : BEA INVERSE

COLUMN / ROW	61	62	63	64	65	66	67	68	69	70
53	0.0354	0.0214	0.0080	0.0068	0.0021	0.0007	0.0007	0.0017	0.0008	0.0008
54	0.0094	0.0003	0.0003	0.0003	0.0004	0.0002	0.0003	0.0005	0.0002	0.0002
55	0.0039	0.0075	0.0030	0.0025	0.0011	0.0006	0.0003	0.0025	0.0007	0.0003
56	0.0014	0.0061	0.0013	0.0008	0.0007	0.0139	0.0043	0.0003	0.0004	0.0007
57	0.0021	0.0301	0.0042	0.0040	0.0015	0.0024	0.0010	0.0004	0.0005	0.0004
58	0.0027	0.0018	0.0007	0.0006	0.0031	0.0006	0.0003	0.0005	0.0009	0.0004
59	0.0178	0.0071	0.0015	0.0022	0.0074	0.0017	0.0007	0.0016	0.0024	0.0011
60	0.0021	0.0040	0.0012	0.0009	0.0069	0.0002	0.0002	0.0003	0.0004	0.0002
61	1.0857	0.0007	0.0003	0.0008	0.0079	0.0001	0.0002	0.0006	0.0002	0.0002
62	0.0027	1.0738	0.0016	0.0011	0.0006	0.0002	0.0002	0.0005	0.0003	0.0003
63	0.0008	0.0047	1.0424	0.0017	0.0006	0.0007	0.0066	0.0005	0.0008	0.0028
64	0.0027	0.0054	0.0015	1.0804	0.0011	0.0011	0.0028	0.0011	0.0017	0.0042
65	0.0554	0.0385	0.0341	0.0466	1.1023	0.0102	0.0231	0.0443	0.0221	0.0210
66	0.0094	0.0146	0.0109	0.0110	0.0135	1.0091	0.0502	0.0069	0.0137	0.0346
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0057	0.0000	0.0000	0.0000
68	0.0289	0.0233	0.0207	0.0245	0.0193	0.0167	0.0224	1.2560	0.0279	0.0342
69	0.0681	0.0678	0.0557	0.0769	0.0444	0.0178	0.0282	0.0239	1.0293	0.0264
70	0.0179	0.0178	0.0134	0.0172	0.0285	0.0133	0.0234	0.0201	0.0249	1.2259
71	0.0258	0.0304	0.0264	0.0340	0.0413	0.0260	0.0668	0.0359	0.0675	0.0763
72	0.0038	0.0052	0.0039	0.0041	0.0019	0.0017	0.0056	0.0015	0.0044	0.0034
73	0.0385	0.0705	0.0509	0.0590	0.0329	0.0241	0.0674	0.0376	0.0598	0.1053
74	0.0041	0.0041	0.0031	0.0039	0.0187	0.0087	0.0029	0.0045	0.0097	0.0048
75	0.0013	0.0022	0.0016	0.0018	0.0010	0.0010	0.3292	0.0011	0.0026	0.0029
76	0.0015	0.0022	0.0016	0.0017	0.0021	0.0014	0.0025	0.0012	0.0017	0.0138
77	0.0038	0.0054	0.0041	0.0056	0.0042	0.0060	0.0046	0.0054	0.0070	0.0263
78	0.0005	0.0005	0.0004	0.0005	0.0017	0.0006	0.0004	0.0006	0.0008	0.0007
79	2.1863	1.9223	1.6744	1.9773	1.5707	1.2510	1.7396	1.7420	1.4073	1.7225

MATRIX : BEA INVERSE

COLUMN / ROW	71	72	73	74	75	76	77	78	79
1	0.0070	0.0040	0.0049	0.0022	0.0087	0.0068	0.0019	0.0015	2.6843
2	0.0077	0.0044	0.0041	0.0020	0.0054	0.0061	0.0018	0.0015	2.8036
3	0.0006	0.0005	0.0008	0.0003	0.0004	0.0004	0.0002	0.0011	1.3367
4	0.0016	0.0004	0.0004	0.0004	0.0006	0.0005	0.0002	0.0003	1.2449
5	0.0004	0.0006	0.0005	0.0015	0.0003	0.0003	0.0002	0.0009	1.4223
6	0.0004	0.0008	0.0005	0.0012	0.0004	0.0003	0.0002	0.0007	1.5986
7	0.0008	0.0016	0.0019	0.0020	0.0012	0.0020	0.0143	0.0176	1.6110
8	0.0068	0.0093	0.0067	0.0099	0.0059	0.0073	0.0062	0.0230	2.4749
9	0.0018	0.0012	0.0007	0.0017	0.0007	0.0008	0.0004	0.0035	1.3061
10	0.0002	0.0004	0.0004	0.0003	0.0004	0.0002	0.0001	0.0007	1.1491
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0000
12	0.0945	0.0213	0.0132	0.0137	0.0289	0.0338	0.0167	0.1934	2.5678
13	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0331
14	0.0057	0.0099	0.0143	0.0049	0.0146	0.0205	0.0054	0.0040	2.8848
15	0.0002	0.0006	0.0010	0.0003	0.0011	0.0006	0.0004	0.0002	1.3459
16	0.0009	0.0119	0.0019	0.0032	0.0009	0.0012	0.0019	0.0009	3.3150
17	0.0004	0.0027	0.0011	0.0021	0.0004	0.0005	0.0012	0.0005	1.6721
18	0.0003	0.0057	0.0004	0.0011	0.0003	0.0004	0.0002	0.0005	1.3625
19	0.0002	0.0068	0.0003	0.0021	0.0002	0.0007	0.0013	0.0004	1.2316
20	0.0059	0.0039	0.0070	0.0027	0.0030	0.0033	0.0019	0.0118	3.1277
21	0.0002	0.0002	0.0001	0.0002	0.0001	0.0001	0.0000	0.0001	1.0976
22	0.0000	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	1.0636
23	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0341
24	0.0046	0.0133	0.0553	0.0070	0.0094	0.0111	0.0066	0.0106	3.2887
25	0.0011	0.0050	0.0044	0.0032	0.0016	0.0020	0.0009	0.0015	1.8656
26	0.0029	0.0049	0.0397	0.0029	0.0136	0.0206	0.0054	0.0048	1.6217
27	0.0091	0.0158	0.0190	0.0123	0.0185	0.0090	0.0042	0.0218	4.4946
28	0.0014	0.0052	0.0034	0.0070	0.0014	0.0016	0.0016	0.0023	2.4380
29	0.0005	0.0187	0.0045	0.0006	0.0009	0.0200	0.0012	0.0010	1.2852
30	0.0043	0.0021	0.0017	0.0085	0.0016	0.0018	0.0009	0.0088	1.3762
31	0.0073	0.0153	0.0094	0.0178	0.0077	0.0093	0.0105	0.0192	2.3362
32	0.0026	0.0100	0.0049	0.0286	0.0025	0.0040	0.0035	0.0045	2.4034
33	0.0001	0.0033	0.0002	0.0001	0.0003	0.0001	0.0001	0.0001	1.4902
34	0.0001	0.0105	0.0003	0.0001	0.0011	0.0002	0.0002	0.0001	1.0628
35	0.0008	0.0022	0.0008	0.0090	0.0008	0.0012	0.0004	0.0015	1.4025
36	0.0027	0.0063	0.0015	0.0133	0.0012	0.0014	0.0009	0.0083	1.6942
37	0.0061	0.0084	0.0064	0.0265	0.0038	0.0040	0.0038	0.0133	6.6450
38	0.0039	0.0086	0.0050	0.0135	0.0034	0.0029	0.0018	0.0075	4.4212
39	0.0007	0.0010	0.0008	0.0009	0.0007	0.0012	0.0003	0.0010	1.2685
40	0.0032	0.0008	0.0005	0.0006	0.0009	0.0011	0.0006	0.0058	1.3268
41	0.0007	0.0024	0.0013	0.0169	0.0006	0.0008	0.0008	0.0011	1.7549
42	0.0026	0.0072	0.0035	0.0143	0.0018	0.0019	0.0014	0.0049	2.4032
43	0.0003	0.0004	0.0036	0.0040	0.0004	0.0003	0.0006	0.0007	1.3786
44	0.0003	0.0002	0.0027	0.0001	0.0003	0.0002	0.0001	0.0002	1.0977
45	0.0005	0.0003	0.0006	0.0003	0.0002	0.0003	0.0006	0.0016	1.2527
46	0.0006	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	0.0011	1.1464
47	0.0004	0.0009	0.0013	0.0034	0.0003	0.0003	0.0003	0.0007	1.6236
48	0.0002	0.0004	0.0009	0.0003	0.0003	0.0002	0.0001	0.0003	1.1896
49	0.0007	0.0007	0.0011	0.0021	0.0004	0.0004	0.0004	0.0012	1.7905
50	0.0003	0.0006	0.0006	0.0132	0.0003	0.0003	0.0004	0.0007	1.5202
51	0.0003	0.0002	0.0038	0.0002	0.0003	0.0002	0.0001	0.0002	1.2386
52	0.0008	0.0006	0.0033	0.0009	0.0004	0.0004	0.0003	0.0015	1.1629

MATRIX : BEA INVERSE

COLUMN / ROW	71	72	73	74	75	76	77	78	79
53	0.0010	0.0039	0.0048	0.0032	0.0009	0.0008	0.0006	0.0021	1.7926
54	0.0006	0.0102	0.0004	0.0002	0.0004	0.0004	0.0003	0.0011	1.0662
55	0.0011	0.0013	0.0005	0.0024	0.0005	0.0006	0.0005	0.0052	1.2468
56	0.0003	0.0006	0.0012	0.0007	0.0006	0.0005	0.0002	0.0005	1.2579
57	0.0004	0.0292	0.0016	0.0008	0.0005	0.0008	0.0004	0.0004	1.5524
58	0.0003	0.0008	0.0013	0.0201	0.0004	0.0005	0.0006	0.0009	1.2448
59	0.0011	0.0023	0.0018	0.1183	0.0011	0.0014	0.0035	0.0026	1.9721
60	0.0002	0.0003	0.0003	0.0003	0.0002	0.0002	0.0008	0.0003	1.4245
61	0.0002	0.0009	0.0008	0.0002	0.0003	0.0002	0.0010	0.0011	1.1600
62	0.0005	0.0008	0.0006	0.0011	0.0003	0.0080	0.0002	0.0010	1.2716
63	0.0005	0.0098	0.0081	0.0005	0.0196	0.0029	0.0005	0.0008	1.1674
64	0.0011	0.0246	0.0058	0.0010	0.0074	0.0030	0.0008	0.0019	1.3291
65	0.0120	0.0261	0.0328	0.0259	0.0271	0.0215	0.1303	0.0317	4.9251
66	0.0045	0.0125	0.0200	0.0110	0.0125	0.0152	0.0043	0.0086	1.8296
67	0.0000	0.0000	0.0004	0.0000	0.0000	0.0005	0.0000	0.0000	1.0079
68	0.0090	0.0270	0.0270	0.0212	0.0239	0.0417	0.0185	0.1297	3.6966
69	0.0197	0.0469	0.0400	0.1363	0.0359	0.0314	0.0173	0.0332	5.6320
70	0.0316	0.0251	0.0172	0.0270	0.0284	0.0139	0.0088	0.0255	2.7260
71	1.0472	0.0736	0.0696	0.0464	0.1338	0.0965	0.0338	0.0240	4.3117
72	0.0009	1.0295	0.0058	0.0027	0.0064	0.0078	0.0025	0.0016	1.3017
73	0.0251	0.0461	1.0643	0.0305	0.0705	0.0349	0.0270	0.0511	4.5925
74	0.0023	0.0104	0.0076	1.0070	0.0050	0.0063	0.0055	0.0047	1.4122
75	0.0011	0.0017	0.0238	0.0011	1.2408	0.0027	0.0009	0.0014	1.7035
76	0.0012	0.0037	0.0029	0.0014	0.0041	1.0102	0.0007	0.0020	1.1715
77	0.0055	0.0054	0.0241	0.0031	0.0050	0.0098	1.0018	0.0035	1.3733
78	0.0002	0.0008	0.0007	0.0007	0.0005	0.0009	0.0006	1.0007	1.0467
79	1.3620	1.6249	1.6043	1.7231	1.7745	1.4952	1.3644	1.7247	151.5624

MATRIX : UN INVERSE

COLUMN / ROW	1	2	3	4	5	6	7	8	9	10
1	1.3327	0.1051	0.0275	0.2258	0.0010	0.0014	0.0013	0.0011	0.0015	-0.0007
2	0.4554	1.0683	0.0153	0.0825	0.0008	0.0013	0.0011	0.0010	0.0013	-0.0010
3	0.0006	-0.0005	1.0240	0.0013	0.0004	0.0014	0.0013	0.0004	0.0003	-0.0011
4	0.0431	0.0471	0.0514	1.0077	0.0001	0.0002	0.0002	0.0001	0.0002	-0.0001
5	0.0008	0.0010	0.0012	0.0015	1.0412	0.0021	0.0025	0.0006	0.0023	-0.0006
6	0.0006	0.0009	0.0008	0.0015	0.0038	1.2184	0.0009	0.0005	0.0011	-0.0062
7	0.0019	0.0016	0.0011	0.0019	0.0063	0.0044	1.1886	0.0005	0.0040	0.0021
8	0.0188	0.0260	0.0157	0.0083	0.0095	0.0091	0.0111	1.0127	0.0131	0.0128
9	0.0025	0.0047	0.0006	0.0011	0.0043	0.0008	0.0008	0.0012	1.0077	0.0079
10	0.0016	0.0034	0.0003	0.0006	0.0005	0.0013	0.0006	0.0003	0.0007	1.0597
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0223	0.0246	0.0060	0.0116	0.0153	0.0157	0.0154	0.0538	0.0151	0.0143
13	0.0000	0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0000
14	0.2271	0.0208	0.0492	0.0802	0.0030	0.0046	0.0039	0.0035	0.0044	-0.0042
15	0.0002	0.0002	0.0005	0.0005	0.0002	0.0003	0.0003	0.0002	0.0003	0.0001
16	0.0025	0.0028	0.0127	0.0105	0.0006	0.0013	0.0011	0.0004	0.0021	0.0008
17	0.0028	0.0028	0.0483	0.0383	0.0005	0.0008	0.0011	0.0005	0.0021	0.0002
18	0.0004	0.0003	0.0008	0.0010	0.0002	0.0004	0.0004	0.0002	0.0004	-0.0001
19	0.0024	0.0024	0.0023	0.0014	0.0001	0.0002	0.0002	0.0001	0.0002	-0.0007
20	0.0029	0.0017	0.0027	0.0122	0.0041	0.0139	0.0131	0.0034	0.0021	-0.0004
21	0.0026	0.0047	0.0008	0.0127	0.0001	0.0001	0.0001	0.0001	0.0001	-0.0001
22	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0000	0.0000
23	0.0000	0.0000	0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000	-0.0000	0.0000
24	0.0113	0.0059	0.0083	0.0454	0.0028	0.0042	0.0041	0.0024	0.0075	-0.0002
25	0.0074	0.0037	0.0073	0.0792	0.0009	0.0016	0.0017	0.0006	0.0021	-0.0025
26	0.0044	0.0027	0.0027	0.0027	0.0018	0.0022	0.0020	0.0015	0.0021	0.0013
27	0.0430	0.0826	0.0128	0.0219	0.0236	0.0618	0.0280	0.0139	0.0332	-0.0616
28	0.0028	0.0026	0.0109	0.0098	0.0018	0.0028	0.0042	0.0012	0.0091	0.0002
29	0.0059	0.0009	0.0008	0.0017	0.0004	0.0004	0.0004	0.0002	0.0003	0.0009
30	0.0014	0.0015	0.0043	0.0018	0.0009	0.0012	0.0012	0.0030	0.0012	0.0002
31	0.0357	0.0503	0.0314	0.0151	0.0155	0.0114	0.0162	0.0075	0.0266	0.0156
32	0.0068	0.0073	0.0044	0.0054	0.0073	0.0104	0.0182	0.0030	0.0440	0.0069
33	0.0002	0.0001	0.0001	0.0007	0.0000	0.0001	0.0001	0.0000	0.0000	-0.0001
34	0.0005	0.0001	0.0003	0.0027	0.0000	0.0001	0.0001	0.0001	0.0001	0.0000
35	0.0028	0.0005	0.0019	0.0013	0.0003	0.0004	0.0006	0.0005	0.0006	0.0001
36	0.0021	0.0032	0.0016	0.0023	0.0039	0.0032	0.0033	0.0057	-0.0000	-0.0030
37	0.0093	0.0087	0.0196	0.0268	0.0295	0.0459	0.0436	0.0097	0.0412	0.0484
38	0.0041	0.0046	0.0089	0.0173	0.0057	0.0084	0.0087	0.0042	0.0111	0.0049
39	0.0053	0.0021	0.0161	0.0022	0.0005	0.0009	0.0006	0.0003	0.0007	-0.0052
40	0.0007	0.0008	0.0009	0.0004	0.0010	0.0022	0.0012	0.0034	0.0020	0.0022
41	0.0027	0.0011	0.0019	0.0023	0.0011	0.0018	0.0023	0.0007	0.0027	0.0020
42	0.0078	0.0061	0.0191	0.1177	0.0034	0.0072	0.0098	0.0033	0.0064	0.0009
43	0.0008	0.0012	0.0007	0.0003	0.0081	0.0113	0.0201	0.0019	0.0249	0.0133
44	0.0049	0.0107	0.0002	0.0009	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000
45	0.0004	0.0005	0.0002	0.0002	0.0186	0.0258	0.0406	0.0026	0.0282	0.0379
46	0.0002	0.0003	0.0001	0.0002	0.0004	0.0033	0.0005	0.0003	0.0100	0.0106
47	0.0005	0.0006	0.0008	0.0015	0.0024	0.0036	0.0055	0.0006	0.0034	0.0028
48	0.0007	0.0010	0.0005	0.0009	0.0003	0.0008	0.0004	0.0002	0.0004	-0.0059
49	0.0010	0.0017	0.0015	0.0006	0.0025	0.0039	0.0057	0.0031	0.0186	-0.0082
50	0.0009	0.0011	0.0007	0.0006	0.0011	0.0308	0.0073	0.0004	0.0070	0.0054
51	0.0001	0.0002	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000
52	0.0003	0.0004	0.0001	0.0002	0.0003	0.0003	0.0003	0.0004	0.0003	0.0002

MATRIX : UN INVERSE

COLUMN / ROW	1	2	3	4	5	6	7	8	9	10
53	0.0009	0.0011	0.0018	0.0011	0.0013	0.0024	0.0058	0.0085	0.0071	0.0133
54	0.0002	0.0002	0.0003	0.0002	0.0001	0.0002	0.0002	0.0003	0.0001	0.0001
55	0.0003	0.0004	0.0254	0.0003	0.0005	0.0009	0.0056	0.0007	0.0010	0.0026
56	0.0002	0.0002	0.0001	0.0002	0.0002	0.0003	0.0001	0.0006	0.0001	0.0002
57	0.0002	0.0002	0.0001	0.0002	0.0002	0.0002	0.0002	0.0017	0.0002	0.0004
58	0.0014	0.0017	0.0027	0.0005	0.0008	0.0010	0.0014	0.0004	0.0020	0.0012
59	0.0026	0.0024	0.0017	0.0011	0.0033	0.0031	0.0059	0.0012	0.0135	0.0038
60	0.0004	0.0001	0.0003	0.0007	0.0006	0.0001	0.0001	0.0002	0.0000	0.0006
61	0.0005	0.0004	0.0157	0.0004	0.0009	0.0020	0.0047	0.0003	0.0003	0.0013
62	0.0003	0.0002	0.0007	0.0002	0.0005	0.0007	0.0003	0.0008	0.0005	0.0002
63	0.0005	0.0005	0.0003	0.0004	0.0004	0.0004	0.0004	0.0003	0.0004	0.0002
64	0.0009	0.0008	0.0014	0.0016	0.0006	0.0016	0.0007	0.0007	0.0007	0.0004
65	0.0616	0.0321	0.0533	0.0570	0.1090	0.0410	0.0380	0.0343	0.0350	0.0847
66	0.0087	0.0073	0.0029	0.0051	0.0041	0.0050	0.0048	0.0030	0.0038	0.0069
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
68	0.0228	0.0231	0.0081	0.0148	0.0312	0.0523	0.0461	0.0137	0.0522	0.0807
69	0.0841	0.0558	0.0590	0.0697	0.0279	0.0375	0.0411	0.0238	0.0466	0.0256
70	0.0245	0.0239	0.0091	0.0171	0.0138	0.0316	0.0222	0.0178	0.0260	0.0174
71	0.0714	0.1066	0.0159	0.0590	0.0935	0.0455	0.0453	0.2082	0.0380	0.0320
72	0.0019	0.0012	0.0026	0.0033	0.0010	0.0017	0.0015	0.0013	0.0018	0.0003
73	0.0435	0.0515	0.0137	0.0227	0.0350	0.0249	0.0257	0.0184	0.0260	0.0126
74	0.0101	0.0092	0.0068	0.0045	0.0035	0.0037	0.0053	0.0052	0.0124	0.0038
75	0.0003	0.0002	0.0005	0.0006	0.0002	0.0003	0.0003	0.0003	0.0003	0.0001
76	0.0109	0.0020	0.0008	0.0025	0.0011	0.0016	0.0016	0.0010	0.0010	0.0044
77	0.0029	0.0028	0.0015	0.0024	0.0030	0.0031	0.0028	0.0023	0.0026	0.0046
78	0.0004	0.0003	0.0004	0.0003	0.0007	0.0009	0.0005	0.0004	0.0015	0.0018
79	2.6369	1.8448	1.6443	2.1288	1.5598	1.7855	1.7312	1.4967	1.6160	1.4648

MATRIX : UN INVERSE

COLUMN	11	12	13	14	15	16	17	18	19	20
ROW										
1	0.0032	0.0028	0.0023	0.3585	0.0223	0.0305	0.0906	0.0127	0.0227	0.0049
2	0.0077	0.0023	0.0020	0.2277	0.2139	0.1838	0.0691	0.0641	0.0684	0.0031
3	0.0078	0.0053	0.0008	0.0059	0.0002	0.0005	0.0008	0.0086	0.0009	0.1346
4	0.0010	0.0006	0.0002	0.0164	0.0095	0.0085	0.0047	0.0035	0.0035	0.0069
5	0.0053	0.0026	0.0028	0.0014	0.0004	0.0012	0.0010	0.0007	0.0007	0.0011
6	0.0048	0.0027	0.0071	0.0006	0.0004	0.0013	0.0011	0.0008	0.0009	0.0008
7	0.0047	0.0024	0.0026	0.0029	0.0014	0.0051	0.0041	0.0027	0.0031	0.0019
8	0.0158	0.0200	0.0054	0.0132	0.0068	0.0116	0.0094	0.0067	0.0077	0.0096
9	0.0170	0.0161	0.0007	0.0019	0.0012	0.0016	0.0011	0.0008	0.0009	0.0012
10	0.0006	0.0006	0.0003	0.0011	0.0009	0.0031	0.0024	0.0014	0.0016	0.0006
11	1.0000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0109	1.0092	0.0074	0.0167	0.0085	0.0153	0.0141	0.0103	0.0129	0.0119
13	0.0001	0.0000	1.0382	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
14	0.0076	0.0089	0.0070	1.2831	0.0086	0.0166	0.0313	0.0111	0.0134	0.0107
15	0.0004	0.0004	0.0005	0.0003	1.3127	0.0003	0.0003	0.0004	0.0004	0.0003
16	0.0039	0.0018	0.0025	0.0032	0.0009	1.5190	0.2682	0.5201	0.5399	0.0029
17	0.0040	0.0013	0.0016	0.0021	0.0008	0.0450	1.0930	0.0227	0.1689	0.0067
18	0.0015	0.0014	0.0017	0.0014	0.0002	-0.0006	0.0116	1.2207	0.0087	0.0028
19	0.0006	0.0002	0.0001	0.0028	0.0005	-0.0078	0.0253	0.0182	1.1327	0.0004
20	0.0839	0.0559	0.0083	0.0065	0.0036	0.0040	0.0053	0.0038	0.0081	1.4543
21	0.0004	0.0003	0.0015	0.0028	0.0019	0.0010	0.0005	0.0004	0.0005	0.0001
22	0.0054	0.0000	0.0008	0.0000	0.0000	0.0000	0.0000	0.0001	-0.0000	-0.0000
23	0.0029	0.0002	0.0004	0.0000	0.0000	0.0000	-0.0000	0.0000	-0.0000	-0.0000
24	0.0129	0.0108	0.0073	0.0398	0.0245	0.0269	0.0414	0.0199	0.0238	0.0071
25	0.0045	0.0037	0.0041	0.0254	0.0188	0.0127	0.0168	0.0154	0.0217	0.0046
26	0.0033	0.0026	0.0040	0.0145	0.0150	0.0031	0.0032	0.0032	0.0035	0.0026
27	0.0208	0.0258	0.0155	0.0316	0.0269	0.1356	0.1136	0.0619	0.0720	0.0249
28	0.0064	0.0081	0.0077	0.0054	0.0153	0.1443	0.2041	0.0766	0.0957	0.0056
29	0.0013	0.0009	0.0008	0.0049	0.0018	0.0058	0.0051	0.0033	0.0030	0.0006
30	0.0077	0.0452	0.0007	0.0020	0.0007	0.0020	0.0012	0.0013	0.0012	0.0087
31	0.0295	0.0392	0.0085	0.0237	0.0127	0.0183	0.0150	0.0105	0.0118	0.0168
32	0.0137	0.0118	0.0283	0.0093	0.0025	0.0038	0.0190	0.0057	0.0535	0.0032
33	0.0002	0.0001	0.0002	0.0002	0.0001	0.0003	0.0003	0.0034	0.0000	0.0003
34	0.0002	0.0001	0.0002	0.0002	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001
35	0.0037	0.0063	0.0016	0.0151	0.0003	0.0061	0.0016	0.0024	0.0024	0.0025
36	0.1036	0.0257	0.0018	0.0020	0.0010	0.0016	0.0012	0.0010	0.0010	0.0090
37	0.0914	0.0452	0.0508	0.0225	0.0053	0.0077	0.0068	0.0056	0.0062	0.0178
38	0.0564	0.0310	0.0846	0.0051	0.0028	0.0049	0.0050	0.0047	0.0052	0.0079
39	0.0012	0.0038	0.0005	0.0290	0.0024	0.0025	0.0026	0.0014	0.0015	0.0030
40	0.0970	0.0299	0.0001	0.0006	0.0003	0.0008	0.0006	0.0005	0.0005	0.0006
41	0.0062	0.0037	0.0056	0.0050	0.0005	0.0007	0.0008	0.0008	0.0005	0.0020
42	0.0273	0.0202	0.0139	0.0084	0.0099	0.0039	0.0038	0.0040	0.0039	0.0283
43	0.0018	0.0010	-0.0001	0.0007	0.0006	0.0007	0.0006	0.0004	0.0005	0.0005
44	0.0003	0.0002	0.0002	0.0025	0.0023	0.0020	0.0008	0.0008	0.0008	0.0001
45	0.0053	0.0047	0.0004	0.0004	0.0002	0.0005	0.0004	0.0003	0.0003	0.0003
46	0.0049	0.0057	0.0003	0.0003	0.0002	0.0006	0.0005	0.0005	0.0005	0.0008
47	0.0025	0.0015	0.0087	0.0006	0.0003	0.0006	0.0005	0.0004	0.0003	0.0007
48	0.0007	0.0005	0.0002	0.0013	0.0005	0.0120	0.0070	0.0049	0.0049	0.0053
49	0.0064	0.0044	0.0049	0.0010	0.0005	0.0016	0.0012	0.0008	0.0008	0.0010
50	0.0020	0.0012	0.0110	0.0008	0.0003	0.0005	0.0004	0.0003	0.0004	0.0006
51	0.0002	0.0001	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001
52	0.0079	0.0069	0.0002	0.0004	0.0003	0.0003	0.0003	0.0002	0.0003	0.0002

MATRIX : UN INVERSE

COLUMN / ROW	11	12	13	14	15	16	17	18	19	20
53	0.0104	0.0063	0.0080	0.0010	0.0007	0.0013	0.0011	0.0009	0.0008	0.0011
54	0.0030	0.0052	0.0002	0.0002	0.0001	0.0002	0.0002	0.0001	0.0002	0.0002
55	0.0187	0.0103	0.0009	0.0005	0.0002	0.0003	0.0003	0.0005	0.0003	0.0036
56	0.0015	0.0013	0.0635	0.0003	0.0002	0.0002	0.0002	0.0003	0.0003	0.0002
57	0.0006	0.0006	0.0304	0.0003	0.0002	0.0002	0.0003	0.0003	0.0002	0.0002
58	0.0020	0.0015	0.0051	0.0010	0.0005	0.0006	0.0005	0.0004	0.0005	0.0009
59	0.0022	0.0024	-0.0016	0.0023	0.0008	0.0012	0.0011	0.0009	0.0009	0.0016
60	0.0003	0.0002	0.1617	0.0005	0.0001	0.0003	0.0003	0.0002	0.0002	0.0004
61	0.0008	0.0005	0.0002	0.0007	0.0002	0.0005	0.0005	0.0004	0.0004	0.0026
62	0.0048	0.0046	0.0095	0.0004	0.0002	0.0007	0.0005	0.0009	0.0008	0.0007
63	0.0009	0.0005	0.0052	0.0009	0.0009	0.0007	0.0006	0.0008	0.0008	0.0006
64	0.0030	0.0053	0.0015	0.0012	0.0008	0.0013	0.0156	0.0272	0.0047	0.0011
65	0.0713	0.0519	0.0283	0.0777	0.0222	0.0543	0.0599	0.0370	0.0465	0.0712
66	0.0097	0.0089	0.0172	0.0094	0.0042	0.0082	0.0091	0.0103	0.0115	0.0074
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
68	0.0262	0.0202	0.0199	0.0266	0.0108	0.0391	0.0310	0.0239	0.0290	0.0226
69	0.1155	0.1098	0.0425	0.0844	0.0301	0.0821	0.1082	0.0825	0.1171	0.0566
70	0.0202	0.0195	0.0142	0.0221	0.0107	0.0183	0.0179	0.0174	0.0218	0.0204
71	0.0298	0.0274	0.0197	0.0478	0.0315	0.0394	0.0337	0.0368	0.0383	0.0241
72	0.0030	0.0027	0.0056	0.0052	0.0038	0.0025	0.0031	0.0026	0.0043	0.0017
73	0.0722	0.0349	0.0434	0.0661	0.0739	0.0426	0.0423	0.0403	0.0422	0.0315
74	0.0078	0.0082	0.0041	0.0088	0.0031	0.0045	0.0043	0.0036	0.0043	0.0071
75	0.0005	0.0005	0.0005	0.0004	0.0003	0.0004	0.0004	0.0004	0.0005	0.0003
76	0.0020	0.0021	0.0028	0.0042	0.0009	0.0015	0.0020	0.0016	0.0019	0.0012
77	0.0041	0.0030	0.0049	0.0041	0.0050	0.0038	0.0042	0.0060	0.0057	0.0028
78	0.0009	0.0008	0.0003	0.0008	0.0002	0.0006	0.0006	0.0004	0.0006	0.0006
79	2.1194	1.8041	1.8444	2.5680	1.9427	2.5446	2.4258	2.4361	2.6460	2.0704

MATRIX : UN INVERSE

COLUMN	21	22	23	24	25	26	27	28	29	30
ROW										
1	0.0029	0.0075	0.0046	0.0066	0.0036	0.0044	0.0053	0.0035	0.0128	0.0202
2	0.0022	0.0150	0.0038	0.0056	0.0031	0.0037	0.0054	0.0029	0.0099	0.0138
3	0.0416	0.0195	0.0119	0.0108	0.0047	0.0045	0.0036	0.0018	0.0011	0.0013
4	0.0023	0.0018	0.0009	0.0010	0.0005	0.0005	0.0006	0.0004	0.0008	0.0011
5	0.0074	0.0029	0.0083	0.0009	0.0007	0.0008	0.0096	0.0031	0.0017	0.0043
6	0.0007	0.0024	0.0026	0.0008	0.0011	0.0009	0.0113	0.0036	0.0012	0.0041
7	0.0047	0.0034	0.0059	0.0113	0.0057	0.0045	0.0106	0.0103	0.0030	0.0049
8	0.0087	0.0074	0.0075	0.0127	0.0121	0.0069	0.0151	0.0103	0.0071	0.0271
9	0.0010	0.0010	0.0024	0.0064	0.0030	0.0026	0.0040	0.0017	0.0018	0.0040
10	0.0003	0.0009	0.0007	0.0027	0.0017	0.0024	0.0280	0.0086	0.0024	0.0051
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0127	0.0118	0.0117	0.0136	0.0131	0.0188	0.0166	0.0143	0.0112	0.0145
13	0.0000	0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
14	0.0082	0.0108	0.0086	0.0217	0.0119	0.0140	0.0214	0.0149	0.0509	0.0723
15	0.0005	0.0005	0.0004	0.0003	0.0003	0.0004	0.0004	0.0004	0.0007	0.0008
16	0.0024	0.0982	0.0095	0.0113	0.0054	0.0057	0.0020	-0.0013	0.0029	0.0013
17	0.0022	0.0373	0.0241	0.0031	0.0014	0.0051	0.0007	-0.0019	0.0022	0.0003
18	0.0042	0.0034	0.0029	0.0016	0.0021	0.0007	0.0011	0.0011	0.0011	0.0012
19	0.0002	0.0006	0.0007	-0.0001	0.0001	0.0002	0.0017	0.0004	0.0003	0.0006
20	0.5180	0.2145	0.1282	0.1156	0.0501	0.0463	0.0092	0.0093	0.0059	0.0047
21	1.0397	0.0004	0.0006	0.0002	0.0001	0.0001	0.0005	0.0005	0.0005	0.0007
22	-0.0000	1.0192	0.0024	0.0000	0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000
23	-0.0000	-0.0002	1.0257	0.0000	-0.0000	0.0000	-0.0000	0.0000	0.0000	0.0000
24	0.0045	0.0178	0.0138	1.2438	0.5362	0.4403	0.0219	0.0646	0.0387	0.0212
25	0.0062	0.0200	0.0237	0.0374	1.0479	0.0222	0.0095	0.0127	0.0355	0.0152
26	0.0030	0.0036	0.0011	0.0043	0.0039	1.2451	0.0031	0.0032	0.0125	0.0075
27	0.0128	0.0397	0.0283	0.0704	0.0580	0.0897	1.2658	0.4472	0.1243	0.3006
28	0.0022	0.0330	0.0190	0.0220	0.0174	0.0154	0.0046	1.0135	0.0096	0.0989
29	0.0008	0.0014	0.0011	0.0020	0.0013	-0.0034	-0.0003	0.0038	1.0714	0.0057
30	0.0032	0.0267	0.0233	0.0016	0.0011	0.0041	0.0030	0.0015	0.0026	1.0034
31	0.0140	0.0121	0.0117	0.0196	0.0204	0.0121	0.0186	0.0143	0.0130	0.0599
32	0.0024	0.0692	0.0589	0.0172	0.0090	0.0158	0.0019	0.0007	0.0414	0.0027
33	0.0005	0.0015	0.0017	0.0004	0.0002	0.0002	0.0005	0.0003	0.0001	0.0003
34	0.0001	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002
35	0.0009	0.0083	0.0267	0.0007	0.0004	0.0005	0.0008	0.0004	0.0245	0.0012
36	0.0036	0.0029	0.0131	0.0032	0.0018	0.0011	0.0039	0.0017	0.0033	0.0043
37	0.1372	0.0493	0.1508	0.0087	0.0062	0.0042	0.0291	0.0120	0.0214	0.0477
38	0.0081	0.0265	0.0292	0.0050	0.0087	0.0040	0.0278	0.0100	0.0061	0.0260
39	0.0012	0.0029	0.0023	0.0016	0.0012	0.0016	0.0143	0.0074	0.0265	0.0721
40	0.0006	0.0004	0.0002	0.0006	0.0006	0.0007	0.0010	0.0006	0.0004	0.0006
41	0.0037	0.0035	0.0140	0.0007	0.0005	-0.0002	0.0010	0.0005	0.0053	0.0015
42	0.0183	0.0785	0.0486	0.0199	0.0129	0.0097	0.0115	0.0051	0.0113	0.0051
43	0.0006	0.0005	0.0006	0.0008	0.0006	-0.0039	0.0013	0.0008	0.0012	0.0008
44	0.0001	0.0003	0.0002	0.0002	0.0002	-0.0033	0.0002	0.0002	0.0008	0.0003
45	0.0004	0.0004	0.0006	0.0008	0.0005	-0.0001	0.0020	0.0009	0.0005	0.0008
46	0.0010	0.0005	0.0004	0.0009	0.0006	0.0007	0.0012	0.0007	0.0003	0.0006
47	0.0007	0.0012	0.0010	0.0006	0.0005	-0.0007	0.0010	0.0005	0.0006	0.0007
48	0.0069	0.0021	0.0011	0.0044	0.0041	0.0073	0.0152	0.0047	0.0014	0.0034
49	0.0016	0.0008	0.0015	0.0036	0.0019	0.0010	0.0026	0.0014	0.0007	0.0012
50	0.0015	0.0009	0.0038	0.0005	0.0004	0.0000	0.0011	0.0005	0.0007	0.0010
51	0.0001	0.0002	-0.0010	0.0000	0.0001	-0.0030	0.0001	0.0002	0.0006	0.0002
52	0.0002	0.0002	0.0003	0.0003	0.0003	-0.0039	0.0003	0.0003	0.0009	0.0004

MATRIX : UN INVERSE

COLUMN / ROW	21	22	23	24	25	26	27	28	29	30
53	0.0017	0.0011	0.0017	0.0011	0.0010	-0.0044	0.0034	0.0015	0.0016	0.0017
54	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0003	0.0003
55	0.0013	0.0008	0.0017	0.0006	0.0004	0.0003	0.0005	0.0004	0.0007	0.0004
56	0.0003	0.0003	0.0002	0.0002	0.0003	0,0001	0.0002	0.0002	0.0004	0.0004
57	0.0003	0.0002	-0.0003	0.0002	0.0003	-0.0001	0.0003	0.0002	0.0004	0.0005
58	0.0006	0.0005	0.0005	0.0005	0.0005	-0.0009	0.0005	0.0004	0.0006	0.0005
59	0.0017	0.0011	0.0011	0.0012	0.0012	0.0009	0.0012	0.0010	0.0010	0.0012
60	0.0006	0.0003	0.0001	0.0004	0.0005	0.0003	-0.0000	0.0003	0.0002	0.0003
61	0.0014	0.0008	0.0006	0.0008	0.0007	-0.0001	0.0006	0.0005	0.0005	0.0006
62	0.0011	0.0006	0.0007	0.0004	0.0005	0.0005	0.0004	0.0004	0.0006	0.0004
63	0.0008	0.0008	0.0006	0.0005	0.0006	0.0131	0.0006	0.0006	0.0019	0.0009
64	0.0013	0.0022	0.0019	0.0009	0.0010	-0.0003	0.0010	0.0008	0.0018	0.0014
65	0.1044	0.0596	0.0561	0.0750	0.0755	0.0596	0.0662	0.0572	0.0501	0.0681
66	0.0095	0.0107	0.0121	0.0078	0.0099	0.0171	0.0092	0.0096	0.0119	0.0119
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
68	0.0290	0.0250	0.0289	0.0467	0.0328	0.0161	0.0763	0.0462	0.0242	0.0342
69	0.0646	0.0797	0.0705	0.0617	0.0557	0.0573	0.0594	0.0609	0.0663	0.0884
70	0.0195	0.0227	0.0272	0.0170	0.0150	0.0224	0.0176	0.0173	0.0181	0.0207
71	0.0291	0.0430	0.0339	0.0237	0.0282	0.0907	0.0251	0.0254	0.0353	0.0349
72	0.0033	0.0033	0.0029	0.0037	0.0046	0.0066	0.0032	0.0032	0.0088	0.0087
73	0.0316	0.0461	0.0410	0.0372	0.0413	0.0397	0.0423	0.0539	0.2002	0.0590
74	0.0066	0.0049	0.0048	0.0041	0.0043	0.0009	0.0039	0.0035	0.0043	0.0046
75	0.0005	0.0005	0.0004	0.0004	0.0003	0.0004	0.0005	0.0004	0.0007	0.0008
76	0.0015	0.0017	0.0019	0.0013	0.0015	0.0030	0.0015	0.0015	0.0019	0.0021
77	0.0034	0.0044	0.0047	0.0034	0.0036	0.0026	0.0036	0.0036	0.0091	0.0050
78	0.0006	0.0005	0.0005	0.0009	0.0006	0.0006	0.0010	0.0008	0.0006	0.0006
79	2.2111	2.1738	2.0335	1.9873	2.1384	2.3070	1.9088	1.9840	2.0149	2.2144

MATRIX : UN INVERSE

COLUMN	31	32	33	34	35	36	37	38	39	40
ROW										
1	0.0017	0.0062	0.2136	0.0458	0.0020	0.0025	0.0013	0.0018	0.0023	0.0024
2	0.0013	0.0084	0.1067	0.0303	0.0018	0.0033	0.0011	0.0017	0.0018	0.0020
3	0.0004	0.0010	0.0024	0.0024	0.0035	0.0009	0.0005	0.0007	0.0007	0.0006
4	0.0002	0.0006	0.0085	0.0023	0.0004	0.0003	0.0002	0.0002	0.0002	0.0002
5	0.0005	0.0014	0.0011	0.0008	0.0010	0.0039	0.0688	0.0019	0.0300	0.0190
6	0.0005	0.0014	0.0008	0.0007	0.0015	0.0011	0.0033	0.1327	0.0037	0.0126
7	0.0019	0.0048	0.0055	0.0027	0.0047	0.0160	0.0336	0.0043	0.0156	0.0105
8	0.5329	0.0071	0.0113	0.0060	0.0100	0.0128	0.0120	0.0123	0.0095	0.0087
9	0.0048	0.0016	0.0013	0.0007	0.0172	0.0979	0.0049	0.0030	0.0025	0.0022
10	-0.0004	0.0029	0.0022	0.0010	0.0022	0.0022	0.0013	0.0006	0.0010	0.0007
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0517	0.0114	0.0140	0.0094	0.0132	0.0157	0.0186	0.0140	0.0139	0.0131
13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0000	-0.0001	0.0000	-0.0000
14	0.0054	0.0091	0.4259	0.0862	0.0063	0.0071	0.0041	0.0053	0.0075	0.0078
15	0.0003	0.0005	0.0003	0.0004	0.0004	0.0004	0.0002	0.0003	0.0004	0.0005
16	0.0006	0.0439	0.0009	0.0648	0.0023	0.0058	0.0011	0.0035	0.0014	0.0017
17	0.0004	0.0469	0.0006	0.0437	0.0015	0.0033	0.0003	0.0019	0.0006	0.0009
18	0.0004	0.0022	0.0006	0.0067	0.0022	0.0019	0.0016	0.0013	0.0017	0.0022
19	0.0000	0.0008	0.0011	0.0111	0.0002	0.0031	0.0001	0.0001	0.0001	0.0001
20	0.0043	0.0076	0.0055	0.0222	0.0362	0.0089	0.0048	0.0067	0.0062	0.0066
21	0.0001	0.0006	0.0017	0.0013	0.0046	0.0003	0.0002	0.0003	0.0003	0.0014
22	0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000	-0.0000	-0.0001	0.0000	-0.0000
23	0.0000	-0.0000	0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	0.0000	-0.0000
24	0.0115	0.0272	0.0202	0.0268	0.0317	0.0300	0.0045	0.0073	0.0238	0.0104
25	0.0045	0.0235	0.0146	0.0250	0.0550	0.0075	0.0019	0.0024	0.0218	0.0083
26	0.0030	0.0030	0.0072	0.0044	0.0029	0.0030	0.0026	0.0022	0.0506	0.0033
27	0.0320	0.1456	0.0729	0.0404	0.0729	0.0369	0.0328	0.0361	0.0339	0.0255
28	0.0012	0.2098	0.0022	0.0353	0.0072	0.0119	0.0015	0.0173	0.0066	0.0039
29	0.0035	0.0013	0.0570	0.0138	0.0007	0.0039	0.0005	0.0005	0.0014	0.0015
30	0.0029	0.0020	0.0013	0.0011	0.0030	0.0011	0.0008	0.0007	0.0308	0.0131
31	1.0985	0.0099	0.0190	0.0095	0.0107	0.0204	0.0175	0.0170	0.0146	0.0137
32	0.0029	1.0560	0.0064	0.1031	0.0271	0.0133	0.0033	0.0036	0.0060	0.0029
33	0.0002	-0.0003	1.2341	0.2306	0.0002	0.0006	0.0004	0.0003	0.0003	0.0003
34	0.0001	0.0001	-0.0000	1.0313	0.0001	0.0001	0.0001	0.0000	0.0001	0.0002
35	0.0006	0.0034	0.0063	0.0023	1.0723	0.0004	0.0001	0.0000	0.0002	0.0105
36	0.0055	0.0012	0.0027	0.0013	0.0308	1.1396	0.0034	0.0056	0.0020	0.0045
37	0.0109	0.0113	0.0115	0.0099	0.0088	0.0288	1.2793	0.0064	0.5559	0.3511
38	0.0072	0.0064	0.0041	0.0054	0.0120	0.0098	0.0397	1.5962	0.0428	0.1508
39	0.0075	0.0024	0.0116	0.0029	0.0012	0.0008	0.0006	0.0006	1.0030	0.0014
40	0.0025	0.0004	0.0005	0.0003	0.0009	0.0021	0.0004	0.0005	0.0003	1.0250
41	0.0007	0.0013	0.0022	0.0011	0.0008	0.0012	0.0081	0.0032	0.0114	0.0190
42	0.0030	0.0082	0.0063	0.0132	0.0033	0.0163	0.0218	0.0069	0.0123	0.0484
43	0.0014	0.0005	0.0006	0.0004	0.0009	0.0032	0.0014	0.0016	0.0007	0.0007
44	0.0002	0.0003	0.0013	0.0005	0.0002	0.0002	0.0001	0.0001	0.0000	0.0001
45	0.0016	0.0004	0.0005	0.0003	0.0010	0.0094	0.0027	0.0031	0.0013	0.0011
46	0.0006	0.0006	0.0005	0.0005	0.0007	0.0028	0.0010	0.0010	0.0007	0.0006
47	0.0005	0.0005	0.0004	0.0004	0.0015	0.0019	0.0016	0.0092	0.0023	0.0063
48	-0.0002	0.0027	0.0012	0.0013	0.0012	0.0006	0.0015	0.0009	0.0012	0.0005
49	0.0020	0.0004	0.0010	0.0005	0.0010	0.0036	0.0078	0.0055	0.0037	0.0083
50	0.0004	0.0010	0.0005	0.0004	0.0005	0.0012	0.0111	0.0164	0.0052	0.0012
51	0.0001	0.0002	0.0002	0.0002	0.0001	-0.0004	0.0000	0.0001	-0.0000	0.0001
52	0.0005	0.0003	0.0003	0.0003	0.0002	0.0003	0.0011	0.0001	0.0004	0.0077

MATRIX : UN INVERSE

COLUMN / ROW	31	32	33	34	35	36	37	38	39	40
53	0.0049	0.0006	0.0009	0.0008	0.0007	0.0016	0.0093	0.0030	0.0042	0.0170
54	0.0003	0.0002	0.0002	0.0002	0.0001	0.0002	0.0001	0.0001	0.0002	0.0001
55	0.0007	0.0002	0.0004	0.0003	0.0003	0.0023	0.0005	0.0005	0.0004	0.0002
56	0.0004	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	-0.0004	0.0002	0.0001
57	0.0010	0.0001	0.0002	0.0002	0.0002	0.0001	0.0003	-0.0010	0.0002	0.0006
58	0.0005	0.0003	0.0007	0.0004	0.0003	0.0008	0.0005	0.0002	0.0004	0.0002
59	0.0014	-0.0007	0.0015	0.0008	0.0010	0.0029	0.0008	0.0006	0.0008	-0.0004
60	0.0005	-0.0004	0.0003	0.0002	0.0003	0.0004	0.0005	-0.0006	0.0004	-0.0001
61	0.0006	0.0004	0.0005	0.0004	0.0004	0.0008	0.0007	0.0007	0.0006	0.0004
62	0.0006	0.0001	0.0005	0.0008	0.0005	0.0005	0.0015	0.0004	0.0009	0.0079
63	0.0006	0.0007	0.0008	0.0009	0.0005	0.0006	0.0005	0.0005	0.0011	0.0010
64	0.0009	0.0024	0.0009	0.0199	0.0030	0.0030	0.0026	0.0018	0.0017	0.0018
65	0.0816	0.0485	0.0596	0.0414	0.0491	0.0945	0.0890	0.0582	0.0768	0.0617
66	0.0052	0.0084	0.0090	0.0097	0.0075	0.0100	0.0093	0.0085	0.0084	0.0129
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
68	0.0366	0.0335	0.0321	0.0211	0.0680	0.0644	0.0536	0.0616	0.0382	0.0358
69	0.0417	0.0618	0.0887	0.0718	0.0583	0.0503	0.0553	0.0639	0.0665	0.0673
70	0.0272	0.0152	0.0224	0.0186	0.0171	0.0209	0.0217	0.0188	0.0231	0.0204
71	0.1397	0.0244	0.0433	0.0296	0.0234	0.0245	0.0226	0.0231	0.0284	0.0316
72	0.0019	0.0040	0.0032	0.0031	0.0030	0.0028	0.0021	0.0019	0.0030	0.0066
73	0.0443	0.0486	0.0527	0.0526	0.0410	0.0410	0.0326	0.0301	0.0447	0.0400
74	0.0050	0.0032	0.0057	0.0037	0.0036	0.0073	0.0039	0.0033	0.0037	0.0041
75	0.0003	0.0005	0.0004	0.0004	0.0004	0.0004	0.0003	0.0003	0.0004	0.0005
76	0.0011	0.0015	0.0030	0.0019	0.0012	0.0016	0.0012	0.0012	0.0014	0.0018
77	0.0037	0.0038	0.0043	0.0068	0.0037	0.0036	0.0031	0.0030	0.0033	0.0039
78	0.0005	0.0006	0.0010	0.0005	0.0005	0.0007	0.0008	0.0006	0.0006	0.0005
79	2.2138	1.9358	2.6231	2.1874	1.7443	1.8736	1.9183	2.2176	2.2422	2.1325

MATRIX : UN INVERSE

COLUMN	41	42	43	44	45	46	47	48	49	50
ROW										
1	0.0017	0.0029	0.0019	0.0034	0.0021	0.0023	0.0021	0.0024	0.0021	0.0023
2	0.0014	0.0024	0.0016	0.0025	0.0018	0.0023	0.0018	0.0021	0.0017	0.0022
3	0.0012	0.0011	0.0005	0.0007	0.0005	0.0004	0.0004	0.0010	0.0005	0.0005
4	0.0002	0.0003	0.0002	0.0003	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
5	0.0166	0.0105	0.0104	0.0126	0.0147	0.0113	0.0069	0.0086	0.0105	0.0076
6	0.0094	0.0116	0.0079	0.0034	0.0035	0.0045	0.0040	0.0052	0.0069	0.0064
7	0.0094	0.0068	0.0075	0.0081	0.0088	0.0068	0.0045	0.0053	0.0064	0.0048
8	0.0088	0.0077	0.0084	0.0077	0.0076	0.0080	0.0071	0.0095	0.0091	0.0063
9	0.0020	0.0026	0.0023	0.0018	0.0019	0.0014	0.0017	0.0014	0.0021	0.0022
10	0.0007	0.0010	0.0004	0.0005	0.0005	0.0005	0.0003	0.0004	0.0003	0.0004
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0112	0.0108	0.0100	0.0101	0.0103	0.0106	0.0092	0.0092	0.0098	0.0115
13	-0.0003	0.0000	0.0000	-0.0000	-0.0000	0.0001	-0.0000	0.0000	-0.0001	0.0000
14	0.0057	0.0075	0.0062	0.0093	0.0064	0.0069	0.0067	0.0073	0.0066	0.0074
15	0.0004	0.0005	0.0004	0.0005	0.0004	0.0005	0.0005	0.0005	0.0005	0.0005
16	0.0008	0.0035	0.0011	0.0020	0.0021	0.0049	0.0014	0.0030	0.0012	0.0032
17	0.0001	0.0082	0.0002	0.0013	0.0015	0.0020	0.0005	0.0013	0.0004	0.0006
18	0.0022	0.0023	0.0020	0.0021	0.0020	0.0019	0.0023	0.0022	0.0020	0.0028
19	-0.0000	0.0003	-0.0006	0.0000	-0.0001	-0.0001	0.0001	0.0001	-0.0001	-0.0001
20	0.0149	0.0119	0.0043	0.0069	0.0046	0.0035	0.0039	0.0100	0.0054	0.0042
21	0.0008	0.0008	0.0008	0.0009	0.0007	0.0001	0.0003	0.0005	0.0005	0.0009
22	-0.0001	-0.0001	-0.0001	-0.0001	-0.0000	-0.0000	-0.0000	-0.0000	-0.0002	-0.0000
23	-0.0000	-0.0001	-0.0001	0.0009	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000
24	0.0141	0.0133	0.0080	0.0086	0.0069	0.0075	0.0065	0.0067	0.0072	0.0079
25	0.0148	0.0155	0.0077	0.0071	0.0046	0.0044	0.0043	0.0035	0.0050	0.0071
26	0.0023	-0.0029	0.0030	0.0037	0.0032	0.0038	0.0031	0.0035	0.0030	0.0031
27	0.0262	0.0389	0.0146	0.0200	0.0180	0.0195	0.0120	0.0161	0.0138	0.0129
28	0.0086	0.0074	0.0026	0.0068	0.0069	0.0102	0.0024	0.0056	0.0023	0.0027
29	0.0014	0.0011	0.0009	0.0013	0.0008	0.0008	0.0009	0.0015	0.0009	0.0011
30	0.0070	0.0105	0.0008	0.0070	0.0045	0.0051	0.0015	0.0016	0.0012	0.0007
31	0.0133	0.0112	0.0139	0.0122	0.0116	0.0130	0.0113	0.0163	0.0149	0.0091
32	0.0146	0.0178	0.0054	0.0263	0.0282	0.0433	0.0065	0.0155	0.0059	0.0059
33	0.0002	0.0005	0.0003	0.0073	0.0002	0.0002	0.0002	0.0018	0.0010	0.0002
34	0.0000	0.0016	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002
35	0.0001	0.0013	-0.0005	0.0004	0.0001	-0.0003	0.0002	0.0003	-0.0004	-0.0000
36	0.0063	0.0133	0.0152	0.0078	0.0077	0.0042	0.0161	0.0058	0.0132	0.0154
37	0.3074	0.1980	0.1929	0.2450	0.2788	0.2101	0.1440	0.1675	0.1956	0.1450
38	0.1155	0.1392	0.1024	0.0417	0.0422	0.0538	0.0489	0.0628	0.0838	0.0841
39	0.0010	0.0013	0.0005	0.0010	0.0007	0.0008	0.0004	0.0006	0.0004	0.0004
40	-0.0000	0.0000	0.0023	0.0004	0.0129	0.0073	0.0059	0.0243	0.0104	0.0001
41	1.0270	0.0142	0.0360	0.0392	0.0184	0.0207	0.0147	0.0135	0.0091	0.0097
42	0.0175	1.0554	0.0200	0.0230	0.0322	0.0209	0.0111	0.0270	0.0304	0.0296
43	0.0006	0.0003	1.1219	0.0608	0.0409	0.0116	0.0004	0.0101	0.0036	-0.0011
44	0.0001	0.0000	0.0001	1.0597	-0.0003	0.0001	0.0001	0.0000	0.0001	0.0001
45	0.0010	0.0008	0.0006	-0.0012	1.0533	-0.0008	0.0004	0.0004	0.0002	0.0007
46	0.0006	0.0002	0.0049	0.0005	-0.0012	1.0984	0.0012	-0.0001	-0.0000	0.0005
47	0.0085	0.0118	0.0437	0.0229	0.0454	0.0242	1.1028	0.0286	0.0260	0.0470
48	0.0017	0.0008	0.0004	0.0001	-0.0006	-0.0006	-0.0007	1.0831	-0.0002	-0.0003
49	0.0020	0.0014	0.0486	0.1166	0.0812	0.0749	0.0514	0.0662	1.1098	0.0029
50	0.0033	0.0027	0.0445	0.0421	0.0086	0.0319	0.0006	0.0055	0.0013	1.1342
51	0.0001	0.0001	0.0001	-0.0001	0.0000	0.0002	0.0000	-0.0000	-0.0008	0.0001
52	0.0000	-0.0000	-0.0001	0.0000	0.0002	-0.0007	0.0000	0.0000	-0.0006	0.0001

MATRIX : UN INVERSE

COLUMN / ROW	41	42	43	44	45	46	47	48	49	50
53	0.0021	0.0057	0.0179	0.0080	0.0210	0.0591	0.0380	0.0438	0.0322	0.0037
54	-0.0000	0.0001	0.0001	0.0014	0.0001	-0.0001	0.0001	0.0001	0.0001	0.0002
55	0.0004	0.0003	0.0001	0.0051	0.0003	0.0004	0.0004	0.0004	0.0007	0.0002
56	-0.0004	0.0001	-0.0011	0.0001	-0.0001	-0.0002	-0.0000	0.0000	-0.0007	-0.0003
57	-0.0002	0.0003	-0.0006	0.0002	0.0004	0.0007	0.0005	0.0006	-0.0002	-0.0003
58	0.0002	0.0002	0.0251	0.0142	0.0022	0.0043	0.0002	0.0001	0.0002	0.0073
59	-0.0035	0.0002	-0.0167	0.0087	-0.0024	-0.0060	0.0004	-0.0000	-0.0046	-0.0069
60	-0.0015	-0.0003	-0.0048	-0.0001	-0.0007	-0.0021	-0.0004	-0.0004	-0.0006	-0.0015
61	0.0004	0.0003	-0.0003	-0.0002	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003
62	0.0002	0.0002	0.0043	0.0028	0.0011	0.0002	0.0004	0.0029	0.0092	0.0002
63	0.0006	0.0007	0.0006	0.0010	0.0007	0.0007	0.0006	0.0007	0.0007	0.0007
64	0.0006	0.0037	0.0015	0.0012	0.0015	0.0011	0.0014	0.0013	0.0010	0.0015
65	0.0530	0.0484	0.0452	0.0565	0.0499	0.0507	0.0341	0.0415	0.0413	0.0402
66	0.0108	0.0096	0.0102	0.0104	0.0104	0.0125	0.0100	0.0110	0.0111	0.0097
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
68	0.0349	0.0348	0.0269	0.0285	0.0299	0.0255	0.0251	0.0246	0.0287	0.0280
69	0.0506	0.0597	0.0675	0.0759	0.0673	0.0729	0.0538	0.0681	0.0586	0.0499
70	0.0202	0.0194	0.0147	0.0219	0.0248	0.0200	0.0173	0.0197	0.0157	0.0212
71	0.0271	0.0269	0.0165	0.0226	0.0219	0.0283	0.0227	0.0485	0.0219	0.0299
72	0.0029	0.0034	0.0035	0.0042	0.0036	0.0038	0.0041	0.0038	0.0036	0.0039
73	0.0358	0.0403	0.0397	0.0537	0.0369	0.0409	0.0357	0.0361	0.0375	0.0376
74	0.0030	0.0035	0.0033	0.0040	0.0036	0.0040	0.0031	0.0035	0.0034	0.0030
75	0.0004	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0006
76	0.0015	0.0016	0.0017	0.0018	0.0018	0.0022	0.0018	0.0020	0.0019	0.0018
77	0.0035	0.0038	0.0039	0.0049	0.0040	0.0046	0.0038	0.0042	0.0041	0.0039
78	0.0005	0.0005	0.0006	0.0005	0.0005	0.0004	0.0003	0.0004	0.0005	0.0003
79	1.9253	1.9182	2.0165	2.1628	2.0551	2.0575	1.7546	1.9517	1.8698	1.8184

MATRIX : UN INVERSE

COLUMN / ROW	51	52	53	54	55	56	57	58	59	60
1	0.0025	0.0026	0.0026	0.0032	0.0029	0.0024	0.0030	0.0024	0.0027	0.0026
2	0.0021	0.0023	0.0022	0.0033	0.0025	0.0022	0.0026	0.0024	0.0032	0.0024
3	0.0003	0.0010	0.0006	0.0011	0.0007	0,0008	0.0006	0.0005	0.0006	0.0003
4	0.0002	0.0003	0.0002	0.0003	0.0003	0,0003	0.0003	0.0002	0.0003	0.0002
5	0.0017	0.0081	0.0062	0.0084	0.0079	0.0016	0.0023	0.0030	0.0112	0.0033
6	0.0036	0.0104	0.0111	0.0092	0.0113	0.0039	0.0077	0.0167	0.0047	0.0083
7	0.0018	0.0057	0.0047	0.0065	0.0047	0.0019	0.0028	0.0033	0.0072	0.0027
8	0.0040	0.0080	0.0087	0.0078	0.0125	0.0050	0.0066	0.0062	0.0076	0.0067
9	0.0006	0.0021	0.0020	0.0029	0.0028	0.0008	0.0023	0.0019	0.0020	0.0011
10	0.0003	0.0007	0.0005	0.0009	0.0008	0.0004	0.0010	0.0012	0.0006	0.0003
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0071	0.0111	0.0094	0.0102	0.0100	0.0075	0.0102	0.0077	0.0114	0.0085
13	-0.0000	-0.0002	-0.0000	-0.0001	-0.0008	0.0027	-0.0003	-0.0000	-0.0000	-0.0051
14	0.0079	0.0075	0.0079	0.0093	0.0083	0.0075	0.0097	0.0074	0.0058	0.0083
15	0.0006	0.0005	0.0005	0.0006	0.0005	0.0006	0.0007	0.0005	0.0003	0.0006
16	0.0016	0.0037	0.0028	0.0086	0.0036	0.0031	0.0021	0.0046	0.0137	0.0030
17	0.0016	0.0046	0.0021	0.0041	0.0055	0.0017	0.0013	0.0026	0.0106	0.0009
18	0.0017	0.0021	0.0021	0.0021	0.0022	0.0020	0.0027	0.0020	0.0019	0.0020
19	-0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	-0.0001	-0.0009	0.0182	0.0001
20	0.0027	0.0103	0.0052	0.0105	0.0061	0.0077	0.0057	0.0040	0.0055	0.0025
21	0.0006	0.0048	0.0007	0.0024	0.0008	0.0008	0.0008	0.0008	0.0006	0.0004
22	-0.0001	-0.0002	-0.0001	-0.0001	-0.0004	0.0197	-0.0004	-0.0000	0.0001	0.0006
23	-0.0000	-0.0001	-0.0000	-0.0000	-0.0001	-0.0001	-0.0000	-0.0000	0.0000	0.0042
24	0.0106	0.0143	0.0181	0.0210	0.0192	0.0142	0.0301	0.0125	0.0076	0.0066
25	0.0042	0.0137	0.0059	0.0246	0.0284	0.0074	0.0128	0.0147	0.0056	0.0034
26	0.0019	0.0035	0.0053	0.0057	0.0029	0.0067	0.0035	0.0024	0.0026	0.0035
27	0.0133	0.0304	0.0249	0.0399	0.0340	0.0172	0.0438	0.0552	0.0235	0.0113
28	0.0068	0.0114	0.0101	0.0256	0.0232	0.0104	0.0142	0.0206	0.0135	0.0049
29	0.0002	0.0009	0.0008	0.0012	0.0010	0.0009	0.0010	0.0007	0.0008	0.0010
30	0.0014	0.0110	0.0049	0.0136	0.0077	0.0018	0.0023	0.0005	0.0094	0.0025
31	0.0064	0.0125	0.0140	0.0116	0.0216	0.0078	0.0096	0.0088	0.0118	0.0106
32	0.0216	0.0373	0.0176	0.0788	0.0379	0.0174	0.0272	0.0590	0.0420	0.0079
33	0.0001	0.0002	0.0002	0.0004	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002
34	0.0001	0.0002	0.0001	0.0013	0.0001	0.0001	0.0002	0.0001	0.0001	0.0002
35	0.0049	0.0019	0.0011	0.0037	0.0441	0.0119	0.0429	0.0008	0.0166	0.0013
36	0.0015	0.0146	0.0147	0.0205	0.0143	0.0030	0.0115	0.0119	0.0070	0.0062
37	0.0291	0.1465	0.1120	0.1521	0.1077	0.0276	0.0362	0.0479	0.2084	0.0594
38	0.0426	0.1252	0.1333	0.1094	0.1468	0.0479	0.0901	0.2272	0.0585	0.0998
39	0.0005	0.0013	0.0008	0.0018	0.0012	0.0005	0.0009	0.0009	0.0011	0.0006
40	-0.0000	0.0022	0.0034	0.0004	0.0004	0.0003	0.0003	0.0003	0.0006	0.0003
41	0.0241	0.0500	0.0179	0.0504	0.0343	0.0299	0.0381	0.0120	0.0584	0.0228
42	0.0206	0.0653	0.0277	0.0599	0.0302	0.0244	0.0238	0.0172	0.0539	0.0253
43	-0.0004	0.0021	0.0050	0.0008	0.0007	-0.0002	0.0002	-0.0008	0.0053	-0.0004
44	-0.0002	0.0001	0.0001	0.0004	0.0002	0.0001	0.0001	0.0001	0.0001	0.0002
45	0.0000	0.0007	0.0007	0.0009	0.0008	0.0003	0.0005	0.0007	0.0005	0.0004
46	0.0001	0.0001	0.0005	0.0006	0.0005	0.0002	0.0001	0.0003	0.0004	0.0004
47	0.0099	0.0140	0.0178	0.0155	0.0117	0.0127	0.0116	0.0148	0.0263	0.0378
48	-0.0004	0.0006	0.0004	0.0005	0.0008	0.0003	0.0007	0.0005	0.0006	0.0002
49	0.0058	0.0193	0.0141	0.0073	0.0028	0.0013	0.0006	0.0200	0.0139	0.0113
50	0.0004	0.0023	0.0030	0.0040	0.0021	0.0034	0.0002	0.0009	0.0202	0.0682
51	1.2556	-0.0009	0.0001	0.0003	0.0001	0.0034	0.0001	-0.0004	-0.0000	0.0001
52	-0.0010	1.0870	-0.0013	0.0254	0.0003	0.0003	0.0001	-0.0004	0.0086	0.0001

MATRIX : UN INVERSE

COLUMN / ROW	51	52	53	54	55	56	57	58	59	60
53	0.0201	0.1141	1.0947	0.0591	0.0291	0.0223	0.0011	0.0233	0.0054	0.0052
54	-0.0002	0.0000	-0.0008	1.0213	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001
55	0.0124	0.0080	0.0087	0.0146	1.0419	0.0105	0.0048	0.0117	0.0080	0.0017
56	0.0005	-0.0007	0.0014	-0.0003	-0.0024	1.0775	-0.0004	-0.0002	0.0048	0.0459
57	0.0982	-0.0000	0.0224	-0.0003	-0.0054	0.2014	1.0600	0.0056	0.0024	0.0175
58	0.0004	-0.0170	0.0024	-0.0005	0.0399	0.0018	-0.0005	1.0603	0.0144	0.0036
59	-0.0034	-0.0020	-0.0009	-0.0026	-0.0002	-0.0002	-0.0058	-0.0307	1.5274	-0.0002
60	-0.0001	-0.0009	0.0001	-0.0005	-0.0029	-0.0025	-0.0010	-0.0001	-0.0001	1.2179
61	-0.0001	0.0004	0.0004	0.0005	0.0004	0.0003	0.0003	0.0003	0.0004	0.0001
62	-0.0002	0.0219	0.0001	0.0328	0.0002	-0.0017	0.0002	0.0005	0.0103	0.0232
63	-0.0000	0.0006	0.0006	0.0010	0.0004	0.0007	0.0005	0.0006	0.0009	0.0045
64	0.0009	0.0043	0.0007	0.0160	0.0013	0.0013	0.0019	0.0018	0.0015	0.0013
65	0.0258	0.0496	0.0422	0.0552	0.0504	0.0291	0.0375	0.0415	0.0581	0.0342
66	0.0116	0.0114	0.0104	0.0106	0.0089	0.0122	0.0118	0.0084	0.0083	0.0146
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
68	0.0132	0.0294	0.0286	0.0336	0.0305	0.0182	0.0295	0.0288	0.0281	0.0233
69	0.0458	0.0891	0.0587	0.0815	0.0769	0.0611	0.0702	0.0745	0.0678	0.0480
70	0.0153	0.0166	0.0188	0.0169	0.0137	0.0124	0.0150	0.0129	0.0164	0.0130
71	0.0245	0.0257	0.0249	0.0277	0.0269	0.0272	0.0272	0.0203	0.0203	0.0198
72	0.0036	0.0031	0.0039	0.0039	0.0037	0.0037	0.0050	0.0037	0.0029	0.0073
73	0.0338	0.0409	0.0305	0.0989	0.0453	0.0489	0.0445	0.0328	0.0406	0.0463
74	0.0021	0.0038	0.0034	0.0037	0.0036	0.0037	0.0035	0.0023	0.0182	0.0039
75	0.0006	0.0005	0.0006	0.0006	0.0006	0.0006	0.0007	0.0005	0.0004	0.0006
76	0.0017	0.0019	0.0019	0.0016	0.0015	0.0023	0.0022	0.0015	0.0012	0.0025
77	0.0015	0.0044	0.0034	0.0068	0.0038	0.0048	0.0043	0.0030	0.0042	0.0043
78	0.0003	0.0005	0.0005	0.0006	0.0005	0.0004	0.0005	0.0005	0.0005	0.0004
79	1.8086	2.1930	1.8802	2.2511	2.0260	1.8598	1.7779	1.8991	2.5485	1.9785

MATRIX : UN INVERSE

COLUMN	61	62	63	64	65	66	67	68	69	70
ROW										
1	0.0034	0.0054	0.0022	0.0047	0.0027	0.0010	0.0286	0.0012	0.0020	0.0027
2	0.0031	0.0086	0.0021	0.0086	0.0021	0.0008	0.0035	0.0010	0.0015	0.0022
3	0.0055	0.0005	0.0007	0.0048	0.0004	0.0002	-0.0040	0.0004	0.0003	0.0004
4	0.0006	0.0006	0.0002	0.0008	0.0002	0.0001	0.0002	0.0001	0.0016	0.0002
5	0.0120	0.0035	0.0019	0.0033	0.0009	0.0001	-0.0086	0.0003	0.0001	0.0001
6	0.0063	0.0079	0.0057	0.0066	0.0005	0.0002	-0.0089	0.0003	0.0001	0.0002
7	0.0075	0.0029	0.0038	0.0036	0.0014	0.0007	-0.0278	0.0392	0.0012	0.0018
8	0.0080	0.0061	0.0047	0.0071	0.0268	0.0056	-0.0810	0.1029	0.0092	0.0057
9	0.0020	0.0012	0.0013	0.0016	0.0010	0.0006	-0.0040	0.0010	0.0004	0.0004
10	0.0005	0.0005	0.0023	0.0010	0.0001	0.0000	-0.0041	0.0001	0.0001	0.0001
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0108	0.0095	0.0077	0.0111	0.0419	0.0339	0.1398	0.0552	0.0128	0.0126
13	-0.0002	-0.0002	-0.0007	0.0000	-0.0000	0.0000	0.0004	0.0000	0.0000	0.0000
14	0.0078	0.0162	0.0075	0.0105	0.0085	0.0031	-0.0295	0.0038	0.0056	0.0088
15	0.0005	0.0008	0.0005	0.0005	0.0003	0.0002	-0.0013	0.0003	0.0004	0.0007
16	0.0081	0.0306	0.0025	0.0320	0.0011	0.0005	-0.0191	0.0005	0.0006	0.0007
17	0.0122	0.0026	0.0008	0.0126	0.0012	0.0002	-0.0081	0.0003	0.0004	0.0004
18	0.0027	0.0028	0.0014	0.0036	0.0007	0.0005	-0.0024	0.0006	0.0002	0.0002
19	0.0054	-0.0003	0.0002	-0.0000	0.0002	0.0001	-0.0021	0.0001	0.0002	0.0001
20	0.0591	0.0045	0.0050	0.0456	0.0036	0.0024	-0.0378	0.0038	0.0026	0.0036
21	0.0004	0.0010	0.0001	0.0007	0.0001	0.0000	-0.0014	0.0000	0.0005	0.0000
22	0.0074	-0.0004	-0.0002	0.0031	0.0001	0.0003	0.0020	0.0000	0.0000	0.0000
23	0.0015	-0.0001	-0.0000	-0.0000	0.0000	0.0000	-0.0001	0.0000	0.0000	0.0000
24	0.0101	0.0155	0.0386	0.0485	0.0053	0.0042	-0.3670	0.0036	0.0148	0.0280
25	0.0042	0.0109	0.0106	0.0274	0.0016	0.0006	-0.0509	0.0007	0.0062	0.0017
26	0.0030	0.0050	0.0024	0.0032	0.0048	0.0036	-0.4839	0.0026	0.0050	0.0326
27	0.0209	0.0210	0.1030	0.0461	0.0072	0.0024	-0.1810	0.0068	0.0040	0.0059
28	0.0120	0.0137	0.0093	0.0494	0.0024	0.0009	-0.0283	0.0010	0.0015	0.0013
29	0.0009	-0.0002	0.0006	0.0010	0.0006	0.0001	-0.1881	0.0004	0.0010	0.0011
30	0.0077	0.0025	0.0008	0.0110	0.0024	0.0016	-0.0177	0.0026	0.0008	0.0008
31	0.0126	0.0094	0.0068	0.0120	0.0526	0.0095	-0.1553	0.0178	0.0153	0.0072
32	0.0211	0.0333	0.0174	0.0510	0.0082	0.0024	-0.0568	0.0023	0.0033	0.0022
33	0.0003	-0.0001	-0.0006	0.0038	0.0000	0.0000	0.0003	0.0000	0.0001	0.0001
34	0.0002	0.0010	0.0019	0.0030	0.0001	0.0001	0.0078	0.0001	0.0002	0.0002
35	0.0060	0.0063	0.0159	0.0070	0.0009	0.0005	-0.0070	0.0005	0.0006	0.0004
36	0.0091	0.0051	0.0044	0.0056	0.0022	0.0011	-0.0297	0.0021	0.0009	0.0007
37	0.2214	0.0610	0.0224	0.0555	0.0157	0.0025	-0.1415	0.0054	0.0022	0.0022
38	0.0747	0.0939	0.0605	0.0764	0.0061	0.0029	-0.0969	0.0035	0.0015	0.0016
39	0.0011	0.0044	0.0014	0.0016	0.0008	0.0003	-0.0090	0.0004	0.0003	0.0004
40	0.0463	0.0002	0.0003	0.0003	0.0017	0.0010	0.0015	0.0019	0.0004	0.0004
41	0.0119	0.0253	0.0048	0.0138	0.0015	0.0007	-0.0283	0.0005	0.0006	0.0004
42	0.0408	0.0271	0.0100	0.0239	0.0055	0.0013	-0.0555	0.0020	0.0016	0.0014
43	0.0325	0.0005	0.0005	0.0002	0.0024	0.0000	-0.1760	0.0011	0.0004	0.0005
44	-0.0001	0.0003	0.0002	-0.0000	0.0001	-0.0001	-0.1331	0.0001	0.0002	0.0003
45	0.0024	0.0004	0.0005	0.0005	0.0004	0.0002	-0.0226	0.0018	0.0002	0.0002
46	0.0008	0.0004	0.0004	0.0005	0.0003	0.0002	-0.0008	0.0003	0.0001	0.0001
47	0.0097	0.0165	0.0003	0.0007	0.0014	0.0003	-0.0484	0.0004	0.0003	0.0002
48	0.0005	0.0006	0.0012	0.0011	0.0001	0.0001	-0.0051	0.0001	0.0001	0.0003
49	0.0518	0.0052	0.0005	0.0006	0.0015	0.0002	-0.0344	0.0008	0.0002	0.0003
50	0.0099	-0.0001	0.0016	0.0012	0.0014	0.0003	-0.0192	0.0005	0.0003	0.0002
51	0.0001	-0.0007	0.0001	0.0000	0.0001	0.0000	-0.1184	0.0001	0.0002	0.0004
52	0.0033	0.0003	0.0003	0.0004	0.0005	0.0002	-0.1617	0.0005	0.0003	0.0005

MATRIX .: UN INVERSE

COLUMN / ROW	61	62	63	64	65	66	67	68	69	70
53	0.0375	0.0206	0.0068	0.0064	0.0022	0.0005	-0.2118	0.0016	0.0006	0.0007
54	0.0105	0.0002	0.0002	0.0002	0.0004	0.0002	0.0001	0.0003	0.0002	0.0002
55	0.0039	0.0082	0.0025	0.0026	0.0010	0.0006	-0.0052	0.0021	0.0006	0.0003
56	0.0003	-0.0016	-0.0016	0.0003	0.0006	0.0145	0.1330	0.0003	0.0003	0.0007
57	0.0006	0.0188	-0.0010	0.0037	0.0014	0.0028	0.0107	0.0003	0.0003	0.0003
58	0.0024	0.0008	-0.0000	0.0004	0.0032	0.0005	-0.0557	0.0005	0.0009	0.0004
59	0.0132	-0.0029	0.0009	0.0007	0.0073	0.0016	-0.0335	0.0012	0.0022	0.0010
60	-0.0010	-0.0007	-0.0027	-0.0001	0.0072	0.0000	-0.0018	0.0003	0.0001	0.0001
61	1.0966	0.0003	0.0003	0.0003	0.0082	0.0001	-0.0261	0.0005	0.0002	0.0002
62	0.0018	1.1041	-0.0006	0.0003	0.0006	0.0002	-0.0147	0.0004	0.0002	0.0003
63	0.0007	0.0056	1.0493	0.0013	0.0006	0.0004	-0.0418	0.0005	0.0008	0.0029
64	0.0020	0.0059	0.0010	1.0952	0.0010	0.0009	-0.1156	0.0009	0.0015	0.0043
65	0.0571	0.0382	0.0338	0.0478	1.1052	0.0094	-0.3046	0.0447	0.0206	0.0220
66	0.0090	0.0158	0.0105	0.0105	0.0137	1.0087	1.2109	0.0066	0.0138	0.0356
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.2139	0.0000	0.0000	0.0000
68	0.0294	0.0231	0.0207	0.0240	0.0159	0.0163	-0.2082	1.2901	0.0279	0.0347
69	0.0690	0.0710	0.0557	0.0816	0.0448	0.0170	-0.3796	0.0218	1.0281	0.0265
70	0.0177	0.0181	0.0124	0.0168	0.0286	0.0131	0.3295	0.0192	0.0250	1.2340
71	0.0249	0.0304	0.0239	0.0309	0.0418	0.0242	0.0258	0.0374	0.0687	0.0776
72	0.0037	0.0056	0.0039	0.0040	0.0019	0.0016	-0.0029	0.0014	0.0044	0.0035
73	0.0374	0.0770	0.0502	0.0587	0.0324	0.0224	0.0277	0.0352	0.0604	0.1084
74	0.0039	0.0038	0.0029	0.0035	0.0192	0.0087	-0.2189	0.0044	0.0100	0.0049
75	0.0005	0.0008	0.0005	0.0005	0.0003	0.0004	12.4338	0.0003	0.0013	0.0007
76	0.0015	0.0023	0.0016	0.0016	0.0021	0.0013	-0.0116	0.0011	0.0017	0.0143
77	0.0039	0.0061	0.0041	0.0047	0.0043	0.0052	-0.9183	0.0060	0.0073	0.0274
78	0.0005	0.0005	0.0004	0.0004	0.0017	0.0006	-0.0130	0.0006	0.0009	0.0007
79	2.2067	1.9150	1.6419	2.0034	1.5668	1.2392	10.1496	1.7487	1.3806	1.7341

MATRIX : UN INVERSE

COLUMN	71	72	73	74	75	76	77	78	79
ROW									
1	0.0006	0.0035	0.0045	0.0016	0.0082	0.0062	0.0017	0.0002	2.7284
2	0.0010	0.0039	0.0037	0.0015	0.0048	0.0055	0.0015	0.0014	2.7936
3	0.0006	0.0005	0.0004	0.0003	0.0004	0.0004	0.0002	0.0048	1.3376
4	0.0002	0.0003	0.0003	0.0003	0.0004	0.0004	-0.0001	0.0003	1.2392
5	0.0003	0.0005	0.0004	0.0015	0.0003	0.0002	0.0002	0.0031	1.4213
6	0.0003	0.0008	0.0004	0.0011	0.0004	0.0003	0.0001	0.0027	1.6049
7	0.0005	0.0016	0.0017	0.0017	0.0011	0.0021	0.0141	-0.0181	1.5561
8	0.0028	0.0092	0.0062	0.0099	0.0052	0.0072	-0.0034	-0.2055	2.0610
9	0.0017	0.0012	0.0004	0.0017	0.0006	0.0007	0.0003	0.0147	1.3030
10	0.0001	0.0004	0.0003	0.0003	0.0004	0.0002	-0.0000	0.0037	1.1657
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0000
12	0.1009	0.0203	0.0095	0.0102	0.0280	0.0339	0.0121	0.8671	3.2381
13	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0341
14	0.0019	0.0097	0.0148	0.0045	0.0145	0.0203	0.0054	0.0004	2.8537
15	0.0001	0.0006	0.0011	0.0003	0.0011	0.0006	0.0004	-0.0000	1.3439
16	0.0003	0.0123	0.0010	0.0031	0.0007	0.0011	0.0022	0.0017	3.3104
17	0.0002	0.0029	0.0005	0.0023	0.0004	0.0005	0.0015	0.0007	1.7002
18	0.0002	0.0058	0.0003	0.0011	0.0002	0.0003	0.0001	0.0002	1.3547
19	0.0000	0.0071	0.0002	0.0022	0.0001	0.0007	0.0017	0.0016	1.2379
20	0.0058	0.0038	0.0025	0.0023	0.0028	0.0034	0.0014	0.0498	3.1945
21	0.0000	0.0001	0.0001	0.0002	0.0001	0.0001	-0.0000	0.0001	1.1058
22	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0588
23	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	1.0348
24	0.0025	0.0124	0.0153	0.0060	0.0086	0.0132	0.0053	0.0297	3.0375
25	0.0006	0.0052	0.0024	0.0032	0.0015	0.0021	0.0001	0.0024	1.8498
26	0.0018	0.0041	0.0200	0.0024	0.0134	0.0216	0.0055	0.0075	1.1720
27	0.0062	0.0161	0.0119	0.0123	0.0189	0.0091	0.0027	0.0939	4.4462
28	0.0011	0.0054	0.0016	0.0076	0.0013	0.0016	0.0017	0.0066	2.4332
29	0.0002	0.0192	0.0060	0.0006	0.0008	0.0200	0.0014	0.0033	1.0954
30	0.0046	0.0021	0.0012	0.0085	0.0015	0.0017	0.0007	0.0378	1.3802
31	0.0050	0.0154	0.0093	0.0179	0.0074	0.0091	0.0092	0.0076	2.1482
32	0.0021	0.0105	0.0033	0.0294	0.0024	0.0040	0.0037	0.0061	2.3703
33	0.0000	0.0035	0.0001	0.0001	0.0003	0.0001	0.0001	0.0001	1.5001
34	0.0000	0.0108	0.0003	0.0001	0.0011	0.0002	0.0002	0.0000	1.0713
35	0.0007	0.0024	0.0007	0.0091	0.0008	0.0012	0.0003	0.0047	1.3931
36	0.0026	0.0065	0.0014	0.0135	0.0011	0.0013	0.0007	0.0363	1.6811
37	0.0049	0.0079	0.0059	0.0270	0.0034	0.0037	0.0036	0.0423	6.6391
38	0.0034	0.0090	0.0045	0.0140	0.0034	0.0028	0.0015	0.0252	4.4545
39	0.0005	0.0011	0.0007	0.0009	0.0007	0.0012	0.0003	0.0038	1.2617
40	0.0034	0.0007	0.0004	0.0004	0.0009	0.0011	0.0004	0.0251	1.3425
41	0.0004	0.0025	0.0012	0.0173	0.0005	0.0008	0.0008	0.0011	1.7197
42	0.0022	0.0073	0.0025	0.0144	0.0016	0.0019	0.0013	0.0147	2.3856
43	0.0002	0.0003	0.0052	0.0041	0.0003	0.0001	0.0006	-0.0013	1.2374
44	0.0001	0.0001	0.0039	0.0001	0.0002	0.0001	0.0001	0.0005	0.9637
45	0.0005	0.0003	0.0008	0.0003	0.0002	0.0003	0.0005	0.0031	1.2465
46	0.0006	0.0002	0.0001	0.0002	0.0002	0.0002	0.0001	0.0049	1.1731
47	0.0002	0.0008	0.0015	0.0035	0.0002	0.0003	0.0003	0.0008	1.5906
48	0.0001	0.0003	0.0003	0.0002	0.0003	0.0003	0.0000	0.0015	1.1882
49	0.0005	0.0004	0.0011	0.0019	0.0003	0.0003	0.0003	0.0027	1.8047
50	0.0002	0.0005	0.0007	0.0137	0.0003	0.0002	0.0004	-0.0005	1.5149
51	0.0001	0.0001	0.0035	0.0001	0.0001	0.0000	0.0001	0.0004	1.1447
52	0.0008	0.0005	0.0048	0.0008	0.0004	0.0002	0.0003	0.0063	1.0071

MATRIX : UN INVERSE

COLUMN	71	72	73	74	75	76	77	78	79
ROW									
53	0.0008	0.0038	0.0065	0.0030	0.0008	0.0006	0.0005	0.0055	1.6207
54	0.0005	0.0105	0.0003	0.0001	0.0004	0.0004	0.0003	0.0044	1.0679
55	0.0010	0.0013	0.0004	0.0024	0.0005	0.0006	0.0003	0.0222	1.2621
56	0.0002	0.0003	0.0008	0.0006	0.0005	0.0005	0.0002	0.0007	1.3485
57	0.0001	0.0297	0.0008	0.0005	0.0003	0.0006	0.0003	-0.0008	1.5131
58	0.0002	0.0007	0.0018	0.0209	0.0004	0.0004	0.0006	-0.0015	1.2040
59	0.0004	0.0018	0.0015	0.1218	0.0010	0.0012	0.0040	-0.0116	1.6332
60	0.0000	0.0001	0.0002	0.0000	0.0001	0.0001	0.0010	-0.0055	1.3669
61	0.0001	0.0009	0.0009	0.0002	0.0002	0.0002	0.0012	-0.0012	1.1335
62	0.0005	0.0007	0.0006	0.0009	0.0003	0.0082	0.0002	0.0040	1.2635
63	0.0003	0.0100	0.0082	0.0005	0.0204	0.0030	0.0004	0.0019	1.1246
64	0.0008	0.0255	0.0061	0.0009	0.0076	0.0029	0.0006	0.0066	1.2152
65	0.0090	0.0262	0.0320	0.0258	0.0269	0.0215	0.1574	-0.0486	4.6076
66	0.0035	0.0124	0.0186	0.0111	0.0124	0.0157	0.0023	0.0097	2.9807
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0006	0.0000	0.0000	1.2146
68	0.0058	0.0274	0.0291	0.0198	0.0242	0.0419	-0.0095	-0.1511	3.2107
69	0.0165	0.0476	0.0393	0.1387	0.0360	0.0311	0.0150	0.0566	5.3049
70	0.0300	0.0251	0.0150	0.0270	0.0284	0.0139	0.0037	0.0262	3.0187
71	1.0443	0.0738	0.0687	0.0466	0.1369	0.0964	0.0277	-0.0617	4.1333
72	0.0006	1.0303	0.0058	0.0028	0.0065	0.0078	0.0023	0.0011	1.2927
73	0.0215	0.0465	1.0689	0.0301	0.0713	0.0349	0.0207	0.1257	4.5695
74	0.0017	0.0105	0.0090	1.0071	0.0050	0.0061	0.0051	-0.0055	1.1694
75	0.0001	0.0008	0.0011	0.0004	1.2496	0.0081	-0.0007	-0.0000	13.7254
76	0.0008	0.0038	0.0029	0.0014	0.0042	1.0102	0.0004	0.0049	1.1616
77	0.0052	0.0053	0.0299	0.0032	0.0047	0.0092	1.0005	-0.0067	0.4372
78	0.0002	0.0008	0.0008	0.0007	0.0006	0.0009	0.0006	1.0005	1.0337
79	1.3069	1.6260	1.5081	1.7221	1.7815	1.4997	1.3165	2.0715	160.5431

MATRIX : OBE INVERSE

COLUMN	1	2	3	4	5	6	7	8	9	10
ROW										
1	1.3162	0.1005	0.1188	0.1848	0.0028	0.0027	0.0024	0.0048	0.0025	0.0019
2	0.4338	1.0780	0.1299	0.3900	0.0037	0.0031	0.0028	0.0064	0.0029	0.0022
3	0.0014	0.0007	1.0209	0.0013	0.0005	0.0013	0.0012	0.0004	0.0004	0.0004
4	0.0388	0.0433	0.0504	1.0183	0.0003	0.0003	0.0003	0.0004	0.0002	0.0002
5	0.0008	0.0009	0.0011	0.0015	1.0401	0.0037	0.0024	0.0006	0.0023	0.0047
6	0.0006	0.0009	0.0008	0.0014	0.0222	1.2103	0.0011	0.0005	0.0040	0.0015
7	0.0018	0.0016	0.0012	0.0019	0.0063	0.0043	1.1870	0.0011	0.0063	0.0047
8	0.0179	0.0257	0.0166	0.0140	0.0105	0.0109	0.0116	1.0325	0.0207	0.0143
9	0.0024	0.0046	0.0011	0.0022	0.0043	0.0013	0.0012	0.0014	1.0151	0.0090
10	0.0018	0.0037	0.0008	0.0017	0.0009	0.0070	0.0009	0.0005	0.0020	1.0478
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0279	0.0295	0.0096	0.0183	0.0160	0.0166	0.0164	0.0532	0.0165	0.0161
13	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0001	0.0003	0.0002
14	0.2179	0.0220	0.0582	0.0611	0.0039	0.0056	0.0047	0.0048	0.0055	0.0044
15	0.0002	0.0002	0.0004	0.0004	0.0002	0.0003	0.0003	0.0003	0.0004	0.0002
16	0.0031	0.0034	0.0133	0.0097	0.0008	0.0015	0.0014	0.0007	0.0028	0.0015
17	0.0029	0.0032	0.0416	0.0273	0.0006	0.0009	0.0012	0.0005	0.0024	0.0006
18	0.0006	0.0005	0.0009	0.0010	0.0003	0.0005	0.0005	0.0003	0.0006	0.0004
19	0.0023	0.0023	0.0026	0.0019	0.0002	0.0003	0.0003	0.0001	0.0006	0.0002
20	0.0048	0.0056	0.0032	0.0109	0.0045	0.0136	0.0132	0.0036	0.0033	0.0030
21	0.0023	0.0044	0.0011	0.0101	0.0001	0.0002	0.0002	0.0001	0.0002	0.0001
22	0.0001	0.0001	0.0002	0.0003	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
23	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0001	0.0000	0.0001	0.0000
24	0.0132	0.0086	0.0085	0.0339	0.0045	0.0057	0.0054	0.0038	0.0108	0.0081
25	0.0077	0.0045	0.0061	0.0557	0.0011	0.0018	0.0018	0.0010	0.0028	0.0015
26	0.0136	0.0133	0.0067	0.0101	0.0093	0.0076	0.0075	0.0064	0.0081	0.0067
27	0.0396	0.0766	0.0205	0.0390	0.0247	0.0611	0.0285	0.0154	0.0346	0.0429
28	0.0039	0.0045	0.0102	0.0088	0.0025	0.0043	0.0049	0.0018	0.0102	0.0028
29	0.0064	0.0023	0.0016	0.0022	0.0009	0.0014	0.0010	0.0008	0.0014	0.0014
30	0.0020	0.0021	0.0041	0.0020	0.0011	0.0015	0.0014	0.0030	0.0015	0.0013
31	0.0353	0.0519	0.0342	0.0275	0.0175	0.0156	0.0183	0.0131	0.0369	0.0193
32	0.0070	0.0075	0.0055	0.0069	0.0077	0.0110	0.0186	0.0034	0.0412	0.0061
33	0.0002	0.0002	0.0001	0.0005	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001
34	0.0005	0.0002	0.0003	0.0019	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001
35	0.0033	0.0008	0.0019	0.0013	0.0004	0.0005	0.0007	0.0006	0.0008	0.0005
36	0.0027	0.0039	0.0022	0.0031	0.0044	0.0037	0.0037	0.0059	0.0677	0.0030
37	0.0106	0.0101	0.0191	0.0261	0.0300	0.0460	0.0438	0.0103	0.0402	0.0424
38	0.0047	0.0053	0.0088	0.0149	0.0064	0.0100	0.0097	0.0047	0.0120	0.0124
39	0.0062	0.0023	0.0145	0.0027	0.0005	0.0010	0.0007	0.0006	0.0009	0.0008
40	0.0012	0.0013	0.0014	0.0015	0.0013	0.0026	0.0016	0.0035	0.0026	0.0022
41	0.0030	0.0013	0.0023	0.0029	0.0014	0.0022	0.0028	0.0010	0.0032	0.0020
42	0.0076	0.0073	0.0162	0.0827	0.0039	0.0077	0.0105	0.0036	0.0081	0.0051
43	0.0007	0.0010	0.0008	0.0007	0.0078	0.0110	0.0195	0.0019	0.0222	0.0094
44	0.0043	0.0097	0.0014	0.0037	0.0007	0.0009	0.0014	0.0003	0.0011	0.0009
45	0.0005	0.0007	0.0004	0.0007	0.0186	0.0255	0.0404	0.0027	0.0266	0.0267
46	0.0003	0.0004	0.0002	0.0005	0.0006	0.0035	0.0009	0.0004	0.0093	0.0077
47	0.0007	0.0008	0.0010	0.0019	0.0025	0.0039	0.0056	0.0008	0.0036	0.0025
48	0.0008	0.0011	0.0008	0.0013	0.0006	0.0011	0.0009	0.0005	0.0012	0.0009
49	0.0012	0.0018	0.0017	0.0018	0.0027	0.0046	0.0062	0.0032	0.0172	0.0068
50	0.0009	0.0011	0.0008	0.0009	0.0017	0.0293	0.0074	0.0005	0.0066	0.0044
51	0.0006	0.0007	0.0003	0.0006	0.0006	0.0005	0.0006	0.0004	0.0006	0.0005
52	0.0005	0.0005	0.0004	0.0006	0.0004	0.0005	0.0005	0.0006	0.0007	0.0005

MATRIX : OBE INVERSE

COLUMN	1	2	3	4	5	6	7	8	9	10
ROW										
53	0.0011	0.0013	0.0021	0.0016	0.0015	0.0029	0.0061	0.0084	0.0070	0.0100
54	0.0004	0.0004	0.0006	0.0007	0.0003	0.0005	0.0006	0.0007	0.0007	0.0006
55	0.0006	0.0006	0.0220	0.0006	0.0006	0.0010	0.0057	0.0008	0.0013	0.0021
56	0.0005	0.0005	0.0006	0.0007	0.0006	0.0010	0.0011	0.0010	0.0012	0.0008
57	0.0004	0.0004	0.0007	0.0005	0.0005	0.0008	0.0008	0.0019	0.0009	0.0008
58	0.0014	0.0017	0.0025	0.0011	0.0009	0.0011	0.0016	0.0005	0.0021	0.0011
59	0.0031	0.0030	0.0028	0.0030	0.0048	0.0058	0.0092	0.0020	0.0156	0.0055
60	0.0007	0.0005	0.0008	0.0013	0.0013	0.0013	0.0017	0.0006	0.0019	0.0013
61	0.0007	0.0006	0.0136	0.0007	0.0012	0.0025	0.0053	0.0005	0.0011	0.0016
62	0.0006	0.0005	0.0010	0.0009	0.0007	0.0014	0.0009	0.0010	0.0010	0.0007
63	0.0006	0.0006	0.0004	0.0006	0.0005	0.0005	0.0005	0.0004	0.0005	0.0004
64	0.0016	0.0016	0.0017	0.0021	0.0011	0.0021	0.0012	0.0010	0.0017	0.0010
65	0.0594	0.0319	0.0516	0.0488	0.1074	0.0424	0.0379	0.0368	0.0403	0.0785
66	0.0091	0.0079	0.0039	0.0062	0.0048	0.0054	0.0053	0.0038	0.0048	0.0080
67	0.0027	0.0032	0.0012	0.0020	0.0022	0.0016	0.0017	0.0014	0.0018	0.0014
68	0.0216	0.0217	0.0103	0.0169	0.0319	0.0511	0.0452	0.0205	0.0518	0.0769
69	0.0807	0.0548	0.0599	0.0649	0.0294	0.0380	0.0417	0.0273	0.0471	0.0367
70	0.0256	0.0255	0.0117	0.0203	0.0155	0.0316	0.0228	0.0210	0.0261	0.0182
71	0.0670	0.1011	0.0255	0.0717	0.0926	0.0467	0.0456	0.2030	0.0387	0.0305
72	0.0024	0.0018	0.0026	0.0031	0.0015	0.0019	0.0018	0.0020	0.0021	0.0015
73	0.0432	0.0505	0.0187	0.0317	0.0359	0.0260	0.0264	0.0219	0.0281	0.0228
74	0.0095	0.0088	0.0071	0.0058	0.0036	0.0038	0.0054	0.0054	0.0118	0.0040
75	0.0014	0.0016	0.0009	0.0014	0.0012	0.0010	0.0010	0.0012	0.0011	0.0008
76	0.0101	0.0020	0.0015	0.0023	0.0012	0.0017	0.0016	0.0012	0.0011	0.0034
77	0.0038	0.0036	0.0022	0.0032	0.0036	0.0042	0.0037	0.0030	0.0038	0.0057
78	0.0055	0.0050	0.0035	0.0045	0.0083	0.0091	0.0078	0.0057	0.0098	0.0138
79	2.6106	1.8837	1.8945	2.3917	1.6254	1.8350	1.7765	1.5764	1.7649	1.6604

MATRIX : OBE INVERSE

COLUMN	11	12	13	14	15	16	17	18	19	20
ROW										
1	0.0048	0.0041	0.0030	0.3621	0.0216	0.0313	0.0823	0.0145	0.0246	0.0189
2	0.0112	0.0048	0.0031	0.2251	0.2158	0.1743	0.0721	0.0629	0.0860	0.0426
3	0.0074	0.0050	0.0008	0.0061	0.0005	0.0008	0.0011	0.0085	0.0013	0.1253
4	0.0010	0.0006	0.0003	0.0151	0.0087	0.0074	0.0043	0.0031	0.0039	0.0074
5	0.0050	0.0026	0.0034	0.0013	0.0005	0.0012	0.0011	0.0007	0.0009	0.0013
6	0.0046	0.0026	0.0070	0.0007	0.0004	0.0013	0.0013	0.0008	0.0011	0.0009
7	0.0046	0.0025	0.0029	0.0028	0.0013	0.0048	0.0040	0.0026	0.0035	0.0020
8	0.0164	0.0204	0.0064	0.0134	0.0072	0.0156	0.0141	0.0089	0.0114	0.0107
9	0.0170	0.0163	0.0010	0.0020	0.0012	0.0017	0.0014	0.0009	0.0013	0.0015
10	0.0011	0.0009	0.0006	0.0014	0.0011	0.0041	0.0037	0.0019	0.0026	0.0009
11	1.0000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0116	1.0096	0.0085	0.0192	0.0099	0.0170	0.0157	0.0115	0.0145	0.0136
13	0.0005	0.0002	1.0323	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
14	0.0089	0.0099	0.0079	1.2751	0.0091	0.0187	0.0308	0.0127	0.0160	0.0127
15	0.0004	0.0004	0.0005	0.0003	1.3121	0.0003	0.0003	0.0004	0.0004	0.0003
16	0.0046	0.0022	0.0032	0.0042	0.0012	1.5155	0.3136	0.5178	0.6983	0.0038
17	0.0042	0.0015	0.0019	0.0023	0.0010	0.0659	1.0920	0.0299	0.1497	0.0059
18	0.0016	0.0015	0.0019	0.0016	0.0003	0.0061	0.0130	1.2187	0.0299	0.0028
19	0.0008	0.0004	0.0003	0.0028	0.0006	0.0083	0.0327	0.0239	1.1015	0.0007
20	0.0834	0.0555	0.0078	0.0074	0.0044	0.0053	0.0070	0.0045	0.0102	1.4288
21	0.0006	0.0004	0.0012	0.0027	0.0018	0.0009	0.0006	0.0004	0.0006	0.0037
22	0.0058	0.0003	0.0013	0.0002	0.0001	0.0002	0.0011	0.0002	0.0012	0.0028
23	0.0031	0.0003	0.0014	0.0001	0.0001	0.0001	0.0001	0.0000	0.0001	0.0001
24	0.0161	0.0125	0.0102	0.0396	0.0249	0.0280	0.0432	0.0211	0.0366	0.0117
25	0.0048	0.0038	0.0048	0.0251	0.0191	0.0138	0.0173	0.0157	0.0205	0.0051
26	0.0184	0.0100	0.0132	0.0273	0.0293	0.0124	0.0135	0.0122	0.0131	0.0098
27	0.0228	0.0273	0.0180	0.0322	0.0263	0.1321	0.1207	0.0620	0.0846	0.0280
28	0.0074	0.0089	0.0085	0.0064	0.0161	0.1452	0.2059	0.0774	0.1051	0.0066
29	0.0019	0.0018	0.0013	0.0066	0.0022	0.0077	0.0071	0.0044	0.0053	0.0014
30	0.0078	0.0453	0.0017	0.0024	0.0009	0.0030	0.0026	0.0018	0.0022	0.0086
31	0.0316	0.0411	0.0106	0.0247	0.0139	0.0275	0.0253	0.0153	0.0197	0.0195
32	0.0154	0.0128	0.0257	0.0098	0.0031	0.0115	0.0324	0.0097	0.0477	0.0054
33	0.0002	0.0002	0.0002	0.0002	0.0001	0.0003	0.0004	0.0038	0.0007	0.0004
34	0.0002	0.0002	0.0003	0.0003	0.0002	0.0002	0.0004	0.0014	0.0020	0.0004
35	0.0038	0.0064	0.0026	0.0149	0.0004	0.0060	0.0022	0.0025	0.0039	0.0027
36	0.1044	0.0271	0.0041	0.0026	0.0013	0.0024	0.0038	0.0016	0.0027	0.0099
37	0.0934	0.0469	0.0649	0.0227	0.0064	0.0099	0.0100	0.0071	0.0099	0.0222
38	0.0563	0.0312	0.0902	0.0059	0.0034	0.0062	0.0069	0.0053	0.0073	0.0096
39	0.0014	0.0037	0.0007	0.0286	0.0025	0.0027	0.0029	0.0016	0.0020	0.0028
40	0.0980	0.0308	0.0033	0.0011	0.0005	0.0011	0.0010	0.0007	0.0010	0.0020
41	0.0075	0.0044	0.0167	0.0056	0.0008	0.0011	0.0015	0.0012	0.0017	0.0040
42	0.0285	0.0209	0.0193	0.0087	0.0103	0.0048	0.0049	0.0045	0.0055	0.0283
43	0.0023	0.0013	0.0026	0.0007	0.0005	0.0007	0.0006	0.0005	0.0006	0.0006
44	0.0008	0.0005	0.0006	0.0023	0.0021	0.0018	0.0009	0.0008	0.0010	0.0006
45	0.0062	0.0052	0.0015	0.0005	0.0003	0.0007	0.0006	0.0004	0.0006	0.0006
46	0.0052	0.0058	0.0010	0.0004	0.0002	0.0007	0.0006	0.0005	0.0007	0.0009
47	0.0037	0.0022	0.0167	0.0008	0.0005	0.0010	0.0009	0.0006	0.0009	0.0012
48	0.0015	0.0011	0.0014	0.0014	0.0006	0.0111	0.0070	0.0047	0.0060	0.0053
49	0.0078	0.0052	0.0096	0.0012	0.0007	0.0018	0.0016	0.0011	0.0018	0.0019
50	0.0024	0.0014	0.0210	0.0008	0.0004	0.0006	0.0006	0.0004	0.0006	0.0008
51	0.0011	0.0007	0.0011	0.0008	0.0008	0.0006	0.0006	0.0006	0.0008	0.0006
52	0.0091	0.0074	0.0029	0.0005	0.0004	0.0004	0.0004	0.0003	0.0004	0.0005

MATRIX : OBE INVERSE

COLUMN / ROW	11	12	13	14	15	16	17	18	19	20
53	0.0115	0.0070	0.0113	0.0013	0.0008	0.0015	0.0015	0.0012	0.0015	0.0015
54	0.0047	0.0064	0.0026	0.0004	0.0003	0.0004	0.0005	0.0004	0.0005	0.0005
55	0.0189	0.0104	0.0105	0.0006	0.0003	0.0005	0.0008	0.0006	0.0006	0.0031
56	0.0028	0.0022	0.0700	0.0006	0.0004	0.0006	0.0007	0.0006	0.0008	0.0007
57	0.0017	0.0012	0.0344	0.0006	0.0004	0.0005	0.0006	0.0005	0.0014	0.0006
58	0.0023	0.0017	0.0055	0.0011	0.0005	0.0007	0.0007	0.0005	0.0006	0.0010
59	0.0058	0.0048	0.0052	0.0030	0.0011	0.0018	0.0018	0.0014	0.0017	0.0030
60	0.0018	0.0012	0.3635	0.0010	0.0003	0.0007	0.0009	0.0006	0.0010	0.0010
61	0.0019	0.0010	0.0039	0.0008	0.0003	0.0006	0.0007	0.0006	0.0006	0.0024
62	0.0054	0.0050	0.0151	0.0007	0.0004	0.0010	0.0025	0.0014	0.0026	0.0011
63	0.0011	0.0007	0.0112	0.0010	0.0010	0.0008	0.0009	0.0010	0.0010	0.0007
64	0.0043	0.0061	0.0028	0.0022	0.0016	0.0028	0.0153	0.0279	0.0108	0.0039
65	0.0706	0.0517	0.0310	0.0757	0.0219	0.0536	0.0589	0.0368	0.0479	0.0692
66	0.0107	0.0094	0.0167	0.0104	0.0052	0.0091	0.0097	0.0110	0.0115	0.0081
67	0.0045	0.0022	0.0028	0.0041	0.0046	0.0027	0.0027	0.0025	0.0027	0.0021
68	0.0258	0.0203	0.0211	0.0261	0.0106	0.0373	0.0312	0.0234	0.0305	0.0231
69	0.1159	0.1100	0.0460	0.0827	0.0301	0.0847	0.1046	0.0830	0.1072	0.0569
70	0.0207	0.0198	0.0147	0.0229	0.0114	0.0193	0.0186	0.0183	0.0216	0.0211
71	0.0302	0.0275	0.0210	0.0467	0.0306	0.0394	0.0346	0.0373	0.0387	0.0279
72	0.0034	0.0030	0.0060	0.0056	0.0043	0.0030	0.0035	0.0030	0.0042	0.0021
73	0.0725	0.0352	0.0445	0.0657	0.0736	0.0428	0.0430	0.0408	0.0430	0.0336
74	0.0078	0.0082	0.0041	0.0085	0.0030	0.0044	0.0043	0.0036	0.0043	0.0071
75	0.0023	0.0014	0.0016	0.0020	0.0022	0.0015	0.0015	0.0015	0.0016	0.0012
76	0.0021	0.0022	0.0026	0.0041	0.0009	0.0015	0.0019	0.0016	0.0018	0.0014
77	0.0049	0.0038	0.0052	0.0050	0.0051	0.0050	0.0053	0.0068	0.0064	0.0036
78	0.0067	0.0054	0.0042	0.0067	0.0025	0.0074	0.0067	0.0050	0.0064	0.0057
79	2.1991	1.8560	2.2095	2.5995	1.9803	2.6398	2.5616	2.4958	2.8948	2.1607

MATRIX : OBE INVERSE

COLUMN	21	22	23	24	25	26	27	28	29	30
ROW										
1	0.0094	0.0101	0.0066	0.0086	0.0051	0.0064	0.0100	0.0068	0.0190	0.0209
2	0.0187	0.0210	0.0088	0.0099	0.0057	0.0067	0.0090	0.0061	0.0144	0.0148
3	0.0487	0.0185	0.0110	0.0099	0.0044	0.0024	0.0031	0.0018	0.0015	0.0014
4	0.0030	0.0019	0.0010	0.0010	0.0006	0.0006	0.0007	0.0005	0.0010	0.0011
5	0.0060	0.0031	0.0077	0.0011	0.0011	0.0007	0.0084	0.0034	0.0021	0.0041
6	0.0011	0.0026	0.0032	0.0012	0.0014	0.0008	0.0101	0.0040	0.0018	0.0040
7	0.0041	0.0035	0.0056	0.0109	0.0056	0.0032	0.0095	0.0093	0.0033	0.0048
8	0.0094	0.0091	0.0087	0.0145	0.0135	0.0086	0.0503	0.0312	0.0142	0.0387
9	0.0012	0.0014	0.0025	0.0066	0.0032	0.0017	0.0042	0.0022	0.0022	0.0043
10	0.0006	0.0013	0.0011	0.0034	0.0023	0.0018	0.0364	0.0139	0.0050	0.0091
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0141	0.0128	0.0127	0.0148	0.0142	0.0150	0.0203	0.0171	0.0137	0.0166
13	0.0001	0.0002	0.0003	0.0001	0.0002	0.0004	0.0001	0.0001	0.0002	0.0001
14	0.0102	0.0119	0.0098	0.0223	0.0129	0.0153	0.0308	0.0205	0.0612	0.0699
15	0.0004	0.0005	0.0004	0.0003	0.0003	0.0007	0.0004	0.0004	0.0007	0.0008
16	0.0036	0.0953	0.0141	0.0146	0.0072	0.0046	0.0026	0.0032	0.0038	0.0025
17	0.0029	0.0374	0.0251	0.0057	0.0028	0.0034	0.0011	0.0017	0.0025	0.0011
18	0.0040	0.0040	0.0031	0.0019	0.0024	0.0007	0.0012	0.0013	0.0013	0.0013
19	0.0005	0.0024	0.0016	0.0025	0.0012	0.0007	0.0015	0.0008	0.0007	0.0007
20	0.5549	0.2087	0.1235	0.1099	0.0484	0.0251	0.0095	0.0097	0.0092	0.0057
21	1.0343	0.0010	0.0010	0.0005	0.0008	0.0002	0.0005	0.0006	0.0006	0.0007
22	0.0055	1.0189	0.0220	0.0003	0.0002	0.0001	0.0001	0.0001	0.0002	0.0001
23	0.0001	0.0062	1.0228	0.0001	0.0001	0.0013	0.0001	0.0001	0.0001	0.0001
24	0.0116	0.0207	0.0210	1.2380	0.5174	0.2362	0.0305	0.0610	0.0431	0.0247
25	0.0091	0.0200	0.0240	0.0411	1.0481	0.0157	0.0106	0.0135	0.0329	0.0153
26	0.0100	0.0136	0.0128	0.0220	0.0265	1.1435	0.0142	0.0153	0.0487	0.0197
27	0.0174	0.0415	0.0310	0.0738	0.0601	0.0537	1.2434	0.4723	0.1589	0.3063
28	0.0040	0.0339	0.0202	0.0265	0.0216	0.0108	0.0294	1.0325	0.0166	0.1044
29	0.0013	0.0024	0.0021	0.0035	0.0024	0.0022	0.0192	0.0116	1.0646	0.0155
30	0.0041	0.0259	0.0220	0.0021	0.0018	0.0030	0.0067	0.0068	0.0040	1.0050
31	0.0158	0.0156	0.0143	0.0243	0.0240	0.0148	0.0933	0.0587	0.0261	0.0774
32	0.0048	0.0730	0.0580	0.0220	0.0134	0.0113	0.0068	0.0220	0.0405	0.0106
33	0.0007	0.0016	0.0017	0.0004	0.0003	0.0002	0.0005	0.0003	0.0003	0.0003
34	0.0011	0.0004	0.0003	0.0003	0.0002	0.0003	0.0002	0.0002	0.0003	0.0003
35	0.0014	0.0089	0.0245	0.0010	0.0024	0.0008	0.0019	0.0012	0.0218	0.0019
36	0.0049	0.0045	0.0136	0.0078	0.0041	0.0025	0.0055	0.0032	0.0056	0.0080
37	0.1190	0.0577	0.1502	0.0129	0.0143	0.0074	0.0390	0.0188	0.0247	0.0489
38	0.0108	0.0295	0.0370	0.0093	0.0131	0.0059	0.0308	0.0140	0.0102	0.0272
39	0.0015	0.0029	0.0024	0.0020	0.0087	0.0014	0.0137	0.0083	0.0248	0.0660
40	0.0016	0.0028	0.0070	0.0011	0.0010	0.0009	0.0015	0.0010	0.0010	0.0012
41	0.0046	0.0068	0.0181	0.0017	0.0049	0.0011	0.0019	0.0013	0.0061	0.0029
42	0.0205	0.0790	0.0562	0.0211	0.0147	0.0074	0.0112	0.0064	0.0146	0.0062
43	0.0007	0.0007	0.0009	0.0008	0.0007	0.0005	0.0013	0.0009	0.0010	0.0009
44	0.0006	0.0011	0.0019	0.0003	0.0003	0.0003	0.0004	0.0003	0.0007	0.0005
45	0.0008	0.0008	0.0011	0.0010	0.0007	0.0005	0.0022	0.0012	0.0007	0.0011
46	0.0011	0.0008	0.0007	0.0010	0.0007	0.0005	0.0013	0.0008	0.0005	0.0007
47	0.0017	0.0023	0.0036	0.0011	0.0010	0.0007	0.0020	0.0010	0.0013	0.0014
48	0.0072	0.0026	0.0020	0.0045	0.0041	0.0039	0.0121	0.0049	0.0022	0.0034
49	0.0023	0.0021	0.0046	0.0039	0.0022	0.0017	0.0041	0.0022	0.0015	0.0020
50	0.0015	0.0013	0.0040	0.0006	0.0006	0.0005	0.0014	0.0008	0.0009	0.0011
51	0.0006	0.0008	0.0008	0.0006	0.0006	0.0007	0.0008	0.0007	0.0020	0.0008
52	0.0005	0.0007	0.0046	0.0004	0.0004	0.0004	0.0005	0.0004	0.0009	0.0005

MATRIX : OBE INVERSE

COLUMN	21	22	23	24	25	26	27	28	29	30
ROW										
53	0.0021	0.0023	0.0040	0.0015	0.0013	0.0012	0.0046	0.0023	0.0024	0.0023
54	0.0006	0.0010	0.0013	0.0005	0.0004	0.0006	0.0006	0.0005	0.0006	0.0006
55	0.0016	0.0012	0.0065	0.0007	0.0005	0.0005	0.0008	0.0006	0.0009	0.0006
56	0.0007	0.0012	0.0034	0.0007	0.0006	0.0009	0.0008	0.0006	0.0014	0.0008
57	0.0014	0.0015	0.0031	0.0005	0.0005	0.0007	0.0007	0.0005	0.0010	0.0007
58	0.0010	0.0009	0.0013	0.0008	0.0007	0.0006	0.0007	0.0006	0.0007	0.0007
59	0.0033	0.0032	0.0045	0.0021	0.0020	0.0020	0.0025	0.0018	0.0021	0.0023
60	0.0011	0.0015	0.0024	0.0009	0.0009	0.0010	0.0009	0.0008	0.0011	0.0011
61	0.0016	0.0014	0.0010	0.0009	0.0007	0.0005	0.0008	0.0006	0.0006	0.0007
62	0.0013	0.0028	0.0095	0.0012	0.0010	0.0010	0.0009	0.0007	0.0084	0.0008
63	0.0008	0.0010	0.0011	0.0020	0.0014	0.0110	0.0009	0.0009	0.0020	0.0010
64	0.0056	0.0061	0.0050	0.0024	0.0022	0.0045	0.0033	0.0024	0.0062	0.0029
65	0.0964	0.0588	0.0549	0.0733	0.0738	0.0459	0.0653	0.0578	0.0506	0.0666
66	0.0098	0.0115	0.0128	0.0087	0.0107	0.0185	0.0098	0.0103	0.0143	0.0125
67	0.0021	0.0029	0.0026	0.0024	0.0026	0.0034	0.0031	0.0034	0.0112	0.0038
68	0.0281	0.0253	0.0285	0.0453	0.0323	0.0229	0.0694	0.0463	0.0264	0.0345
69	0.0635	0.0793	0.0701	0.0619	0.0561	0.0497	0.0587	0.0607	0.0658	0.0852
70	0.0203	0.0233	0.0269	0.0176	0.0159	0.0202	0.0191	0.0183	0.0195	0.0214
71	0.0305	0.0433	0.0353	0.0257	0.0300	0.0793	0.0340	0.0305	0.0371	0.0375
72	0.0034	0.0037	0.0034	0.0040	0.0049	0.0067	0.0037	0.0037	0.0092	0.0087
73	0.0333	0.0468	0.0422	0.0384	0.0421	0.0547	0.0490	0.0549	0.1807	0.0603
74	0.0066	0.0049	0.0048	0.0041	0.0043	0.0049	0.0041	0.0036	0.0043	0.0046
75	0.0013	0.0017	0.0015	0.0013	0.0014	0.0022	0.0017	0.0018	0.0051	0.0023
76	0.0016	0.0018	0.0019	0.0014	0.0016	0.0030	0.0016	0.0015	0.0019	0.0021
77	0.0042	0.0052	0.0054	0.0045	0.0045	0.0160	0.0063	0.0050	0.0087	0.0061
78	0.0071	0.0058	0.0061	0.0089	0.0070	0.0056	0.0120	0.0086	0.0058	0.0073
79	2.3235	2.2642	2.1728	2.0770	2.2234	1.9869	2.1511	2.2155	2.1835	2.3244

MATRIX : OBE INVERSE

COLUMN / ROW	31	32	33	34	35	36	37	38	39	40
1	0.0045	0.0080	0.2084	0.0442	0.0033	0.0035	0.0021	0.0026	0.0039	0.0034
2	0.0053	0.0102	0.1025	0.0305	0.0040	0.0048	0.0024	0.0029	0.0036	0.0035
3	0.0006	0.0013	0.0024	0.0025	0.0036	0.0010	0.0006	0.0007	0.0007	0.0010
4	0.0004	0.0007	0.0077	0.0021	0.0004	0.0004	0.0002	0.0003	0.0003	0.0003
5	0.0009	0.0018	0.0010	0.0009	0.0011	0.0039	0.0633	0.0039	0.0265	0.0174
6	0.0010	0.0020	0.0009	0.0009	0.0017	0.0016	0.0056	0.1171	0.0045	0.0118
7	0.0026	0.0049	0.0054	0.0027	0.0045	0.0150	0.0311	0.0048	0.0140	0.0098
8	0.5074	0.0134	0.0130	0.0075	0.0118	0.0173	0.0126	0.0129	0.0105	0.0097
9	0.0056	0.0029	0.0014	0.0010	0.0171	0.0962	0.0049	0.0032	0.0027	0.0025
10	0.0015	0.0046	0.0028	0.0014	0.0028	0.0044	0.0017	0.0017	0.0014	0.0011
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0509	0.0130	0.0157	0.0106	0.0149	0.0175	0.0193	0.0150	0.0146	0.0138
13	0.0001	0.0003	0.0001	0.0001	0.0001	0.0001	0.0004	0.0002	0.0004	0.0026
14	0.0076	0.0124	0.4117	0.0820	0.0077	0.0082	0.0053	0.0065	0.0109	0.0086
15	0.0003	0.0005	0.0003	0.0004	0.0004	0.0004	0.0003	0.0003	0.0004	0.0005
16	0.0009	0.0455	0.0027	0.0716	0.0036	0.0072	0.0016	0.0039	0.0019	0.0027
17	0.0006	0.0480	0.0018	0.0437	0.0020	0.0040	0.0007	0.0023	0.0009	0.0016
18	0.0006	0.0041	0.0009	0.0136	0.0023	0.0020	0.0017	0.0014	0.0019	0.0023
19	0.0002	0.0026	0.0012	0.0120	0.0006	0.0030	0.0003	0.0004	0.0003	0.0006
20	0.0049	0.0102	0.0065	0.0226	0.0385	0.0100	0.0059	0.0072	0.0069	0.0097
21	0.0001	0.0007	0.0016	0.0013	0.0045	0.0004	0.0003	0.0004	0.0004	0.0014
22	0.0001	0.0005	0.0001	0.0003	0.0055	0.0002	0.0001	0.0002	0.0001	0.0005
23	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0014
24	0.0141	0.0354	0.0215	0.0290	0.0337	0.0314	0.0067	0.0097	0.0251	0.0129
25	0.0050	0.0235	0.0147	0.0248	0.0536	0.0081	0.0028	0.0035	0.0221	0.0089
26	0.0126	0.0140	0.0176	0.0160	0.0123	0.0119	0.0096	0.0090	0.0536	0.0120
27	0.0474	0.1535	0.0746	0.0433	0.0718	0.0422	0.0343	0.0381	0.0350	0.0271
28	0.0029	0.2106	0.0076	0.0382	0.0093	0.0155	0.0030	0.0175	0.0082	0.0059
29	0.0049	0.0047	0.0565	0.0139	0.0022	0.0045	0.0012	0.0013	0.0024	0.0021
30	0.0041	0.0036	0.0018	0.0016	0.0036	0.0017	0.0016	0.0015	0.0335	0.0123
31	1.0948	0.0233	0.0231	0.0129	0.0156	0.0281	0.0193	0.0193	0.0169	0.0157
32	0.0036	1.0558	0.0178	0.1062	0.0280	0.0199	0.0050	0.0062	0.0075	0.0079
33	0.0002	0.0012	1.2287	0.2213	0.0003	0.0006	0.0004	0.0003	0.0003	0.0003
34	0.0001	0.0017	0.0032	1.0307	0.0002	0.0002	0.0002	0.0001	0.0002	0.0003
35	0.0007	0.0037	0.0062	0.0026	1.0699	0.0010	0.0006	0.0009	0.0006	0.0099
36	0.0074	0.0110	0.0036	0.0028	0.0348	1.1337	0.0052	0.0066	0.0056	0.0070
37	0.0129	0.0203	0.0127	0.0130	0.0136	0.0325	1.2716	0.0370	0.5300	0.3453
38	0.0090	0.0131	0.0052	0.0077	0.0148	0.0124	0.0519	1.5363	0.0488	0.1472
39	0.0077	0.0031	0.0112	0.0030	0.0017	0.0011	0.0008	0.0008	1.0033	0.0028
40	0.0028	0.0011	0.0009	0.0007	0.0048	0.0032	0.0019	0.0017	0.0027	1.0238
41	0.0011	0.0082	0.0028	0.0025	0.0020	0.0021	0.0100	0.0070	0.0250	0.0257
42	0.0038	0.0115	0.0069	0.0143	0.0051	0.0166	0.0266	0.0120	0.0155	0.0529
43	0.0014	0.0007	0.0006	0.0005	0.0009	0.0033	0.0021	0.0030	0.0013	0.0040
44	0.0003	0.0004	0.0012	0.0005	0.0003	0.0005	0.0021	0.0004	0.0011	0.0013
45	0.0018	0.0008	0.0006	0.0004	0.0011	0.0092	0.0039	0.0032	0.0020	0.0065
46	0.0007	0.0007	0.0005	0.0005	0.0007	0.0029	0.0012	0.0011	0.0008	0.0027
47	0.0007	0.0019	0.0007	0.0008	0.0020	0.0050	0.0070	0.0108	0.0051	0.0097
48	0.0008	0.0039	0.0013	0.0016	0.0013	0.0011	0.0034	0.0018	0.0020	0.0034
49	0.0023	0.0017	0.0012	0.0010	0.0015	0.0048	0.0093	0.0071	0.0048	0.0165
50	0.0006	0.0016	0.0006	0.0006	0.0007	0.0015	0.0113	0.0168	0.0054	0.0064
51	0.0006	0.0007	0.0007	0.0007	0.0005	0.0007	0.0006	0.0006	0.0007	0.0011
52	0.0006	0.0005	0.0005	0.0004	0.0005	0.0012	0.0015	0.0009	0.0009	0.0178

MATRIX : OBE INVERSE

COLUMN / ROW	31	32	33	34	35	36	37	38	39	40
53	0.0048	0.0024	0.0012	0.0013	0.0052	0.0038	0.0099	0.0056	0.0057	0.0220
54	0.0006	0.0013	0.0004	0.0006	0.0006	0.0007	0.0011	0.0014	0.0008	0.0051
55	0.0008	0.0006	0.0005	0.0005	0.0007	0.0024	0.0012	0.0042	0.0008	0.0015
56	0.0008	0.0022	0.0010	0.0012	0.0011	0.0009	0.0010	0.0035	0.0011	0.0032
57	0.0012	0.0011	0.0005	0.0007	0.0008	0.0008	0.0009	0.0015	0.0009	0.0024
58	0.0006	0.0005	0.0007	0.0005	0.0005	0.0010	0.0013	0.0066	0.0010	0.0019
59	0.0021	0.0026	0.0020	0.0017	0.0018	0.0054	0.0093	0.0143	0.0058	0.0096
60	0.0008	0.0050	0.0008	0.0011	0.0008	0.0012	0.0013	0.0011	0.0063	0.0060
61	0.0008	0.0006	0.0006	0.0006	0.0006	0.0010	0.0011	0.0009	0.0008	0.0103
62	0.0008	0.0018	0.0012	0.0047	0.0012	0.0010	0.0022	0.0017	0.0015	0.0095
63	0.0007	0.0016	0.0009	0.0043	0.0009	0.0008	0.0006	0.0006	0.0011	0.0012
64	0.0017	0.0100	0.0021	0.0248	0.0041	0.0050	0.0032	0.0025	0.0025	0.0031
65	0.0790	0.0493	0.0584	0.0411	0.0490	0.0900	0.0853	0.0576	0.0736	0.0594
66	0.0064	0.0094	0.0097	0.0106	0.0083	0.0105	0.0098	0.0092	0.0093	0.0132
67	0.0029	0.0031	0.0032	0.0033	0.0026	0.0026	0.0021	0.0020	0.0028	0.0026
68	0.0407	0.0336	0.0315	0.0212	0.0648	0.0609	0.0526	0.0576	0.0375	0.0349
69	0.0441	0.0619	0.0873	0.0715	0.0587	0.0507	0.0560	0.0638	0.0661	0.0669
70	0.0285	0.0163	0.0230	0.0192	0.0177	0.0214	0.0219	0.0190	0.0231	0.0206
71	0.1294	0.0268	0.0427	0.0303	0.0245	0.0266	0.0232	0.0239	0.0286	0.0317
72	0.0026	0.0043	0.0036	0.0035	0.0034	0.0031	0.0025	0.0024	0.0034	0.0065
73	0.0456	0.0495	0.0519	0.0525	0.0417	0.0417	0.0337	0.0318	0.0457	0.0412
74	0.0050	0.0035	0.0055	0.0037	0.0036	0.0071	0.0039	0.0035	0.0039	0.0042
75	0.0016	0.0017	0.0017	0.0018	0.0014	0.0015	0.0012	0.0011	0.0016	0.0016
76	0.0013	0.0015	0.0029	0.0018	0.0012	0.0016	0.0013	0.0012	0.0014	0.0018
77	0.0046	0.0047	0.0052	0.0074	0.0050	0.0048	0.0042	0.0042	0.0046	0.0048
78	0.0089	0.0066	0.0071	0.0047	0.0106	0.0122	0.0100	0.0099	0.0077	0.0070
79	2.2575	2.1015	2.6584	2.2585	1.8280	1.9569	1.9964	2.2739	2.3048	2.2676

MATRIX : OBE INVERSE

COLUMN	41	42	43	44	45	46	47	48	49	50
ROW										
1	0.0029	0.0037	0.0028	0.0041	0.0029	0.0032	0.0029	0.0037	0.0033	0.0032
2	0.0032	0.0039	0.0028	0.0037	0.0030	0.0035	0.0030	0.0039	0.0032	0.0034
3	0.0015	0.0015	0.0006	0.0009	0.0006	0.0006	0.0006	0.0010	0.0007	0.0006
4	0.0003	0.0004	0.0003	0.0004	0.0003	0.0003	0.0003	0.0004	0.0003	0.0003
5	0.0152	0.0130	0.0096	0.0123	0.0134	0.0105	0.0081	0.0087	0.0099	0.0078
6	0.0091	0.0121	0.0079	0.0041	0.0044	0.0052	0.0055	0.0058	0.0071	0.0072
7	0.0088	0.0079	0.0069	0.0079	0.0081	0.0065	0.0053	0.0055	0.0063	0.0050
8	0.0095	0.0099	0.0087	0.0084	0.0083	0.0086	0.0079	0.0096	0.0093	0.0071
9	0.0022	0.0028	0.0023	0.0020	0.0020	0.0017	0.0029	0.0017	0.0023	0.0026
10	0.0011	0.0014	0.0007	0.0008	0.0008	0.0008	0.0007	0.0007	0.0008	0.0006
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0122	0.0123	0.0107	0.0113	0.0115	0.0116	0.0106	0.0121	0.0110	0.0123
13	0.0046	0.0010	0.0070	0.0009	0.0008	0.0010	0.0007	0.0024	0.0007	0.0006
14	0.0070	0.0085	0.0073	0.0099	0.0075	0.0080	0.0076	0.0083	0.0088	0.0081
15	0.0004	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
16	0.0031	0.0051	0.0026	0.0033	0.0032	0.0053	0.0029	0.0040	0.0027	0.0040
17	0.0018	0.0074	0.0013	0.0021	0.0022	0.0027	0.0015	0.0021	0.0015	0.0012
18	0.0023	0.0024	0.0021	0.0022	0.0021	0.0021	0.0024	0.0022	0.0021	0.0028
19	0.0008	0.0008	0.0006	0.0008	0.0008	0.0007	0.0008	0.0005	0.0006	0.0005
20	0.0157	0.0154	0.0062	0.0089	0.0059	0.0056	0.0057	0.0104	0.0070	0.0052
21	0.0008	0.0008	0.0008	0.0009	0.0007	0.0004	0.0004	0.0006	0.0007	0.0009
22	0.0003	0.0018	0.0007	0.0004	0.0002	0.0003	0.0004	0.0004	0.0003	0.0003
23	0.0013	0.0009	0.0003	0.0010	0.0002	0.0020	0.0002	0.0002	0.0002	0.0001
[illegible]	0.0177	0.0221	0.0103	0.0115	0.0093	0.0105	0.0096	0.0095	0.0107	0.0102
[illegible]	0.0149	0.0142	0.0075	0.0076	0.0053	0.0057	0.0056	0.0048	0.0062	0.0074
26	0.0111	0.0122	0.0117	0.0147	0.0113	0.0124	0.0111	0.0115	0.0116	0.0112
27	0.0306	0.0384	0.0175	0.0225	0.0201	0.0220	0.0174	0.0198	0.0196	0.0158
28	0.0124	0.0096	0.0051	0.0085	0.0081	0.0106	0.0058	0.0082	0.0053	0.0046
29	0.0020	0.0021	0.0014	0.0018	0.0014	0.0015	0.0014	0.0019	0.0014	0.0016
30	0.0074	0.0093	0.0022	0.0072	0.0051	0.0056	0.0024	0.0025	0.0026	0.0014
31	0.0153	0.0160	0.0147	0.0138	0.0133	0.0145	0.0130	0.0169	0.0158	0.0111
32	0.0196	0.0207	0.0107	0.0282	0.0287	0.0393	0.0158	0.0214	0.0130	0.0101
33	0.0004	0.0006	0.0004	0.0063	0.0005	0.0004	0.0003	0.0016	0.0009	0.0003
34	0.0002	0.0014	0.0002	0.0003	0.0002	0.0003	0.0003	0.0003	0.0003	0.0002
35	0.0015	0.0022	0.0013	0.0013	0.0013	0.0016	0.0011	0.0017	0.0014	0.0012
36	0.0078	0.0130	0.0142	0.0090	0.0091	0.0068	0.0234	0.0078	0.0145	0.0188
37	0.3009	0.2518	0.1881	0.2431	0.2656	0.2072	0.1585	0.1721	0.1957	0.1518
38	0.1127	0.1524	0.0997	0.0487	0.0524	0.0628	0.0681	0.0716	0.0881	0.0910
39	0.0051	0.0016	0.0008	0.0013	0.0010	0.0011	0.0010	0.0009	0.0009	0.0008
40	0.0079	0.0097	0.0054	0.0059	0.0141	0.0148	0.0074	0.0272	0.0205	0.0060
41	1.0271	0.0219	0.0346	0.0388	0.0219	0.0244	0.0337	0.0165	0.0148	0.0145
42	0.0266	1.0503	0.0261	0.0328	0.0394	0.0447	0.0404	0.0301	0.0419	0.0329
43	0.0052	0.0020	1.0923	0.0545	0.0379	0.0203	0.0023	0.0105	0.0138	0.0014
44	0.0052	0.0014	0.0130	1.0520	0.0252	0.0062	0.0040	0.0051	0.0025	0.0008
45	0.0017	0.0046	0.0131	0.0100	1.0453	0.0447	0.0033	0.0140	0.0103	0.0014
46	0.0009	0.0027	0.0047	0.0021	0.0095	1.0730	0.0021	0.0056	0.0060	0.0010
47	0.0157	0.0184	0.0394	0.0250	0.0445	0.0321	1.0856	0.0442	0.0301	0.0529
48	0.0031	0.0045	0.0061	0.0046	0.0048	0.0154	0.0090	1.0668	0.0152	0.0032
49	0.0115	0.0117	0.0543	0.1051	0.0850	0.0822	0.0472	0.0654	1.0888	0.0145
50	0.0049	0.0046	0.0479	0.0377	0.0115	0.0284	0.0063	0.0110	0.0095	1.1142
51	0.0009	0.0029	0.0015	0.0018	0.0040	0.0041	0.0126	0.0097	0.0076	0.0015
52	0.0013	0.0035	0.0019	0.0025	0.0026	0.0086	0.0025	0.0027	0.0102	0.0012

MATRIX : OBE INVERSE

COLUMN	41	42	43	44	45	46	47	48	49	50
ROW										
53	0.0055	0.0111	0.0212	0.0121	0.0221	0.0516	0.0355	0.0412	0.0376	0.0173
54	0.0022	0.0050	0.0025	0.0038	0.0026	0.0035	0.0132	0.0079	0.0117	0.0018
55	0.0015	0.0019	0.0020	0.0053	0.0014	0.0019	0.0015	0.0042	0.0021	0.0013
56	0.0051	0.0036	0.0272	0.0070	0.0034	0.0036	0.0032	0.0047	0.0068	0.0036
57	0.0022	0.0023	0.0072	0.0038	0.0029	0.0116	0.0030	0.0035	0.0055	0.0104
58	0.0020	0.0030	0.0271	0.0134	0.0040	0.0062	0.0019	0.0036	0.0041	0.0076
59	0.0428	0.0149	0.0260	0.0318	0.0455	0.0372	0.0268	0.0145	0.0319	0.0123
60	0.0035	0.0072	0.0458	0.0047	0.0088	0.0041	0.0047	0.0032	0.0098	0.0095
61	0.0009	0.0023	0.0170	0.0074	0.0076	0.0031	0.0013	0.0061	0.0051	0.0043
62	0.0053	0.0062	0.0073	0.0048	0.0052	0.0043	0.0059	0.0050	0.0124	0.0153
63	0.0009	0.0009	0.0012	0.0013	0.0009	0.0010	0.0011	0.0025	0.0010	0.0011
64	0.0045	0.0069	0.0025	0.0074	0.0027	0.0031	0.0048	0.0031	0.0027	0.0026
65	0.0523	0.0504	0.0449	0.0553	0.0493	0.0493	0.0377	0.0417	0.0426	0.0410
66	0.0113	0.0104	0.0111	0.0112	0.0110	0.0126	0.0107	0.0114	0.0116	0.0105
67	0.0024	0.0026	0.0025	0.0033	0.0024	0.0026	0.0024	0.0024	0.0025	0.0024
68	0.0338	0.0350	0.0271	0.0287	0.0295	0.0263	0.0267	0.0253	0.0287	0.0280
69	0.0533	0.0602	0.0658	0.0745	0.0669	0.0709	0.0555	0.0661	0.0601	0.0521
70	0.0202	0.0198	0.0157	0.0220	0.0241	0.0203	0.0181	0.0203	0.0168	0.0210
71	0.0274	0.0275	0.0191	0.0238	0.0237	0.0287	0.0243	0.0448	0.0240	0.0297
72	0.0034	0.0038	0.0040	0.0045	0.0040	0.0041	0.0042	0.0041	0.0040	0.0042
73	0.0380	0.0412	0.0407	0.0527	0.0387	0.0420	0.0378	0.0379	0.0396	0.0388
74	0.0037	0.0037	0.0041	0.0043	0.0042	0.0045	0.0035	0.0038	0.0039	0.0035
75	0.0014	0.0015	0.0015	0.0018	0.0015	0.0016	0.0015	0.0015	0.0015	0.0015
76	0.0015	0.0016	0.0018	0.0018	0.0018	0.0021	0.0018	0.0020	0.0019	0.0018
77	0.0044	0.0046	0.0046	0.0055	0.0049	0.0052	0.0045	0.0050	0.0048	0.0045
78	0.0066	0.0068	0.0056	0.0061	0.0060	0.0056	0.0052	0.0053	0.0057	0.0055
79	2.1117	2.1539	2.2441	2.2840	2.2328	2.2897	1.9987	2.1168	2.1172	1.9889

MATRIX : OBE INVERSE

COLUMN	51	52	53	54	55	56	57	58	59	60
ROW										
1	0.0034	0.0039	0.0034	0.0040	0.0037	0.0033	0.0038	0.0033	0.0033	0.0032
2	0.0033	0.0040	0.0036	0.0045	0.0038	0.0035	0.0038	0.0035	0.0045	0.0032
3	0.0005	0.0011	0.0007	0.0011	0.0008	0.0008	0.0008	0.0006	0.0007	0.0005
4	0.0003	0.0004	0.0003	0.0004	0.0004	0.0003	0.0003	0.0003	0.0004	0.0003
5	0.0023	0.0083	0.0061	0.0079	0.0079	0.0022	0.0032	0.0041	0.0106	0.0036
6	0.0033	0.0096	0.0102	0.0086	0.0119	0.0048	0.0073	0.0158	0.0053	0.0076
7	0.0023	0.0057	0.0046	0.0060	0.0049	0.0022	0.0032	0.0038	0.0070	0.0029
8	0.0051	0.0089	0.0092	0.0091	0.0126	0.0060	0.0081	0.0081	0.0084	0.0071
9	0.0012	0.0024	0.0023	0.0028	0.0030	0.0010	0.0023	0.0020	0.0021	0.0013
10	0.0005	0.0011	0.0010	0.0013	0.0012	0.0006	0.0013	0.0016	0.0009	0.0006
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0094	0.0119	0.0107	0.0115	0.0110	0.0084	0.0111	0.0095	0.0123	0.0092
13	0.0006	0.0013	0.0059	0.0012	0.0006	0.0103	0.0012	0.0007	0.0012	0.0187
14	0.0089	0.0100	0.0089	0.0100	0.0092	0.0084	0.0103	0.0084	0.0068	0.0087
15	0.0006	0.0005	0.0005	0.0005	0.0005	0.0006	0.0006	0.0005	0.0003	0.0006
16	0.0025	0.0051	0.0043	0.0081	0.0045	0.0042	0.0035	0.0058	0.0162	0.0037
17	0.0019	0.0046	0.0027	0.0043	0.0053	0.0020	0.0021	0.0034	0.0102	0.0016
18	0.0017	0.0023	0.0022	0.0023	0.0024	0.0021	0.0027	0.0021	0.0023	0.0021
19	0.0004	0.0009	0.0005	0.0008	0.0006	0.0004	0.0004	0.0010	0.0169	0.0004
20	0.0042	0.0110	0.0066	0.0110	0.0077	0.0080	0.0070	0.0054	0.0066	0.0044
21	0.0006	0.0039	0.0008	0.0022	0.0009	0.0008	0.0008	0.0010	0.0007	0.0006
22	0.0005	0.0013	0.0005	0.0010	0.0007	0.0173	0.0013	0.0007	0.0004	0.0012
23	0.0025	0.0003	0.0002	0.0002	0.0001	0.0003	0.0001	0.0001	0.0002	0.0035
24	0.0141	0.0167	0.0191	0.0229	0.0207	0.0158	0.0310	0.0147	0.0104	0.0095
25	0.0047	0.0134	0.0079	0.0207	0.0251	0.0077	0.0124	0.0133	0.0060	0.0043
26	0.0120	0.0135	0.0127	0.0226	0.0129	0.0165	0.0134	0.0106	0.0114	0.0133
27	0.0147	0.0313	0.0278	0.0386	0.0350	0.0191	0.0408	0.0490	0.0255	0.0165
28	0.0072	0.0128	0.0122	0.0229	0.0223	0.0115	0.0150	0.0196	0.0146	0.0074
29	0.0011	0.0030	0.0016	0.0039	0.0017	0.0013	0.0018	0.0018	0.0015	0.0015
30	0.0020	0.0104	0.0055	0.0119	0.0073	0.0022	0.0030	0.0021	0.0094	0.0026
31	0.0086	0.0148	0.0155	0.0148	0.0225	0.0099	0.0130	0.0131	0.0138	0.0117
32	0.0209	0.0373	0.0229	0.0651	0.0363	0.0190	0.0276	0.0521	0.0433	0.0145
33	0.0002	0.0003	0.0003	0.0006	0.0003	0.0002	0.0002	0.0003	0.0003	0.0002
34	0.0002	0.0004	0.0003	0.0011	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
35	0.0041	0.0038	0.0035	0.0052	0.0410	0.0108	0.0357	0.0032	0.0161	0.0019
36	0.0080	0.0146	0.0149	0.0190	0.0173	0.0043	0.0121	0.0119	0.0083	0.0072
37	0.0437	0.1597	0.1162	0.1522	0.1197	0.0396	0.0558	0.0720	0.2092	0.0671
38	0.0419	0.1211	0.1307	0.1078	0.1518	0.0609	0.0917	0.2021	0.0640	0.0970
39	0.0007	0.0018	0.0012	0.0020	0.0015	0.0008	0.0012	0.0012	0.0014	0.0008
40	0.0016	0.0371	0.0049	0.0107	0.0094	0.0018	0.0026	0.0023	0.0034	0.0022
41	0.0225	0.0463	0.0221	0.0524	0.0338	0.0294	0.0360	0.0186	0.0587	0.0228
42	0.0217	0.0678	0.0325	0.0560	0.0329	0.0270	0.0324	0.0234	0.0548	0.0272
43	0.0010	0.0041	0.0153	0.0033	0.0016	0.0012	0.0014	0.0020	0.0086	0.0044
44	0.0008	0.0017	0.0018	0.0081	0.0007	0.0006	0.0006	0.0007	0.0019	0.0007
45	0.0007	0.0022	0.0028	0.0017	0.0014	0.0007	0.0010	0.0014	0.0029	0.0018
46	0.0006	0.0036	0.0011	0.0029	0.0007	0.0009	0.0027	0.0008	0.0014	0.0017
47	0.0118	0.0190	0.0198	0.0181	0.0127	0.0144	0.0145	0.0167	0.0275	0.0343
48	0.0012	0.0053	0.0018	0.0026	0.0036	0.0014	0.0019	0.0076	0.0021	0.0018
49	0.0134	0.0308	0.0161	0.0153	0.0049	0.0085	0.0124	0.0195	0.0178	0.0132
50	0.0015	0.0049	0.0066	0.0057	0.0034	0.0060	0.0025	0.0062	0.0209	0.0566
51	1.2036	0.0061	0.0013	0.0118	0.0012	0.0049	0.0013	0.0012	0.0018	0.0014
52	0.0036	1.0654	0.0081	0.0259	0.0024	0.0029	0.0024	0.0079	0.0094	0.0014

MATRIX : OBE INVERSE

COLUMN / ROW	51	52	53	54	55	56	57	58	59	60
53	0.0227	0.0981	1.0826	0.1075	0.0401	0.0307	0.0339	0.0364	0.0087	0.0091
54	0.0019	0.0927	0.0220	1.0206	0.0051	0.0040	0.0079	0.0145	0.0031	0.0021
55	0.0123	0.0083	0.0131	0.0131	1.0362	0.0176	0.0251	0.0132	0.0083	0.0031
56	0.0232	0.0055	0.0200	0.0054	0.0065	1.0804	0.0616	0.0307	0.0073	0.0612
57	0.0820	0.0055	0.0331	0.0061	0.0155	0.1823	1.0615	0.0189	0.0055	0.0231
58	0.0022	0.0137	0.0040	0.0025	0.0346	0.0031	0.0025	1.0482	0.0184	0.0046
59	0.0103	0.0439	0.0138	0.0222	0.0164	0.0046	0.0053	0.0542	1.5026	0.0075
60	0.0031	0.0132	0.0062	0.0099	0.0016	0.0219	0.0063	0.0023	0.0031	1.1970
61	0.0006	0.0026	0.0089	0.0036	0.0011	0.0008	0.0008	0.0012	0.0014	0.0016
62	0.0053	0.0222	0.0182	0.0294	0.0048	0.0087	0.0077	0.0112	0.0122	0.0229
63	0.0011	0.0012	0.0016	0.0015	0.0012	0.0035	0.0033	0.0063	0.0012	0.0047
64	0.0026	0.0062	0.0030	0.0144	0.0033	0.0033	0.0035	0.0031	0.0029	0.0032
65	0.0282	0.0492	0.0427	0.0518	0.0492	0.0307	0.0381	0.0428	0.0571	0.0342
66	0.0125	0.0121	0.0112	0.0119	0.0101	0.0130	0.0124	0.0094	0.0090	0.0153
67	0.0024	0.0029	0.0023	0.0052	0.0028	0.0031	0.0028	0.0023	0.0026	0.0029
68	0.0160	0.0293	0.0284	0.0316	0.0303	0.0192	0.0281	0.0286	0.0280	0.0230
69	0.0471	0.0826	0.0611	0.0775	0.0745	0.0612	0.0687	0.0719	0.0677	0.0490
70	0.0163	0.0175	0.0188	0.0178	0.0149	0.0135	0.0158	0.0144	0.0169	0.0139
71	0.0291	0.0271	0.0259	0.0283	0.0275	0.0273	0.0278	0.0228	0.0210	0.0210
72	0.0041	0.0038	0.0043	0.0044	0.0041	0.0042	0.0051	0.0039	0.0032	0.0071
73	0.0386	0.0461	0.0373	0.0832	0.0456	0.0493	0.0452	0.0364	0.0412	0.0464
74	0.0030	0.0043	0.0037	0.0040	0.0038	0.0038	0.0038	0.0039	0.0174	0.0041
75	0.0016	0.0017	0.0015	0.0026	0.0017	0.0018	0.0018	0.0014	0.0014	0.0017
76	0.0018	0.0019	0.0019	0.0017	0.0016	0.0023	0.0022	0.0015	0.0013	0.0025
77	0.0045	0.0053	0.0045	0.0067	0.0046	0.0052	0.0050	0.0042	0.0049	0.0049
78	0.0035	0.0061	0.0057	0.0065	0.0061	0.0041	0.0055	0.0057	0.0062	0.0046
79	1.9005	2.4507	2.0873	2.3945	2.1613	2.0068	2.0240	2.1465	2.6168	2.0807

MATRIX : OBE INVERSE

COLUMN	61	62	63	64	65	66	67	68	69	70
ROW										
1	0.0045	0.0061	0.0035	0.0069	0.0037	0.0016	0.0064	0.0020	0.0055	0.0041
2	0.0056	0.0085	0.0035	0.0110	0.0058	0.0017	0.0054	0.0023	0.0054	0.0043
3	0.0048	0.0008	0.0008	0.0044	0.0004	0.0003	0.0003	0.0005	0.0005	0.0004
4	0.0006	0.0006	0.0003	0.0008	0.0004	0.0001	0.0004	0.0002	0.0018	0.0003
5	0.0114	0.0038	0.0020	0.0033	0.0009	0.0002	0.0002	0.0007	0.0003	0.0002
6	0.0063	0.0069	0.0051	0.0056	0.0006	0.0003	0.0002	0.0005	0.0003	0.0002
7	0.0072	0.0032	0.0037	0.0036	0.0019	0.0007	0.0009	0.0349	0.0014	0.0017
8	0.0087	0.0072	0.0079	0.0093	0.0261	0.0057	0.0043	0.0943	0.0098	0.0062
9	0.0021	0.0015	0.0015	0.0019	0.0012	0.0007	0.0004	0.0015	0.0007	0.0005
10	0.0009	0.0009	0.0029	0.0016	0.0003	0.0001	0.0002	0.0004	0.0003	0.0002
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0119	0.0107	0.0093	0.0121	0.0455	0.0333	0.0138	0.0762	0.0141	0.0165
13	0.0009	0.0036	0.0040	0.0003	0.0002	0.0002	0.0001	0.0001	0.0002	0.0001
14	0.0087	0.0159	0.0093	0.0140	0.0090	0.0038	0.0140	0.0044	0.0139	0.0091
15	0.0005	0.0007	0.0005	0.0005	0.0003	0.0003	0.0011	0.0003	0.0004	0.0006
16	0.0094	0.0256	0.0038	0.0320	0.0013	0.0006	0.0006	0.0008	0.0018	0.0009
17	0.0113	0.0042	0.0016	0.0132	0.0012	0.0003	0.0003	0.0004	0.0008	0.0005
18	0.0029	0.0032	0.0016	0.0042	0.0008	0.0006	0.0003	0.0006	0.0014	0.0003
19	0.0052	0.0009	0.0004	0.0021	0.0003	0.0001	0.0002	0.0002	0.0006	0.0002
20	0.0537	0.0075	0.0064	0.0417	0.0039	0.0025	0.0018	0.0054	0.0041	0.0037
21	0.0006	0.0010	0.0003	0.0009	0.0001	0.0000	0.0001	0.0001	0.0005	0.0001
22	0.0070	0.0023	0.0003	0.0036	0.0001	0.0002	0.0001	0.0001	0.0003	0.0001
23	0.0015	0.0002	0.0001	0.0002	0.0001	0.0000	0.0000	0.0000	0.0002	0.0001
24	0.0125	0.0213	0.0401	0.0494	0.0062	0.0050	0.0070	0.0064	0.0172	0.0263
25	0.0049	0.0114	0.0112	0.0256	0.0017	0.0007	0.0011	0.0010	0.0067	0.0019
26	0.0112	0.0199	0.0144	0.0239	0.0114	0.0089	0.0203	0.0106	0.0186	0.0508
27	0.0227	0.0269	0.0946	0.0493	0.0088	0.0032	0.0073	0.0113	0.0076	0.0064
28	0.0127	0.0157	0.0173	0.0478	0.0027	0.0011	0.0011	0.0017	0.0025	0.0016
29	0.0015	0.0080	0.0025	0.0054	0.0009	0.0004	0.0010	0.0008	0.0028	0.0013
30	0.0078	0.0032	0.0016	0.0103	0.0026	0.0017	0.0008	0.0037	0.0013	0.0010
31	0.0143	0.0119	0.0136	0.0161	0.0519	0.0099	0.0058	0.0190	0.0168	0.0081
32	0.0226	0.0379	0.0199	0.0553	0.0083	0.0026	0.0019	0.0030	0.0050	0.0025
33	0.0004	0.0007	0.0006	0.0043	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001
34	0.0003	0.0010	0.0019	0.0051	0.0001	0.0001	0.0005	0.0001	0.0004	0.0002
35	0.0063	0.0073	0.0188	0.0066	0.0009	0.0005	0.0005	0.0007	0.0009	0.0004
36	0.0098	0.0067	0.0053	0.0070	0.0026	0.0013	0.0008	0.0034	0.0026	0.0010
37	0.2256	0.0708	0.0286	0.0586	0.0163	0.0030	0.0025	0.0104	0.0051	0.0029
38	0.0770	0.0865	0.0595	0.0685	0.0065	0.0032	0.0020	0.0051	0.0034	0.0020
39	0.0013	0.0041	0.0015	0.0020	0.0008	0.0003	0.0005	0.0006	0.0007	0.0004
40	0.0452	0.0023	0.0011	0.0020	0.0020	0.0011	0.0006	0.0026	0.0017	0.0007
41	0.0147	0.0251	0.0071	0.0181	0.0017	0.0008	0.0005	0.0008	0.0013	0.0005
42	0.0432	0.0317	0.0121	0.0247	0.0058	0.0015	0.0012	0.0028	0.0029	0.0016
43	0.0335	0.0017	0.0007	0.0011	0.0024	0.0002	0.0003	0.0011	0.0006	0.0005
44	0.0072	0.0009	0.0004	0.0016	0.0003	0.0001	0.0003	0.0003	0.0004	0.0003
45	0.0041	0.0011	0.0007	0.0009	0.0005	0.0002	0.0002	0.0018	0.0007	0.0003
46	0.0016	0.0008	0.0006	0.0011	0.0004	0.0002	0.0001	0.0005	0.0003	0.0002
47	0.0121	0.0203	0.0022	0.0023	0.0015	0.0004	0.0003	0.0006	0.0008	0.0003
48	0.0028	0.0028	0.0019	0.0019	0.0004	0.0002	0.0003	0.0003	0.0008	0.0004
49	0.0499	0.0107	0.0022	0.0047	0.0017	0.0004	0.0003	0.0010	0.0011	0.0004
50	0.0114	0.0032	0.0021	0.0018	0.0014	0.0004	0.0002	0.0006	0.0006	0.0002
51	0.0032	0.0016	0.0008	0.0009	0.0005	0.0004	0.0008	0.0005	0.0012	0.0013
52	0.0047	0.0091	0.0033	0.0010	0.0006	0.0004	0.0004	0.0007	0.0007	0.0005

MATRIX : OBE INVERSE

COLUMN / ROW	61	62	63	64	65	66	67	68	69	70
53	0.0370	0.0319	0.0095	0.0089	0.0023	0.0009	0.0008	0.0019	0.0013	0.0009
54	0.0117	0.0035	0.0081	0.0043	0.0006	0.0004	0.0005	0.0006	0.0008	0.0004
55	0.0044	0.0105	0.0083	0.0037	0.0012	0.0007	0.0004	0.0026	0.0009	0.0004
56	0.0036	0.0638	0.0098	0.0025	0.0011	0.0141	0.0045	0.0006	0.0010	0.0009
57	0.0033	0.0316	0.0113	0.0044	0.0016	0.0025	0.0011	0.0005	0.0009	0.0005
58	0.0037	0.0023	0.0010	0.0010	0.0032	0.0006	0.0003	0.0006	0.0013	0.0004
59	0.0259	0.0176	0.0031	0.0047	0.0078	0.0018	0.0008	0.0020	0.0030	0.0012
60	0.0098	0.0170	0.0040	0.0040	0.0073	0.0004	0.0004	0.0005	0.0015	0.0003
61	1.0874	0.0045	0.0005	0.0040	0.0080	0.0001	0.0003	0.0007	0.0004	0.0003
62	0.0040	1.0771	0.0098	0.0026	0.0008	0.0004	0.0004	0.0006	0.0010	0.0004
63	0.0009	0.0093	1.0428	0.0019	0.0007	0.0007	0.0067	0.0006	0.0014	0.0028
64	0.0057	0.0111	0.0029	1.0820	0.0015	0.0014	0.0034	0.0015	0.0034	0.0051
65	0.0555	0.0387	0.0342	0.0467	1.1025	0.0102	0.0233	0.0446	0.0226	0.0213
66	0.0099	0.0156	0.0115	0.0119	0.0140	1.0094	0.0512	0.0075	0.0146	0.0360
67	0.0024	0.0044	0.0032	0.0037	0.0021	0.0015	1.0099	0.0024	0.0038	0.0066
68	0.0291	0.0234	0.0209	0.0247	0.0194	0.0168	0.0225	1.2564	0.0280	0.0343
69	0.0685	0.0684	0.0560	0.0775	0.0450	0.0182	0.0291	0.0244	1.0302	0.0275
70	0.0182	0.0183	0.0138	0.0177	0.0290	0.0136	0.0243	0.0206	0.0258	1.2269
71	0.0258	0.0305	0.0263	0.0340	0.0413	0.0260	0.0668	0.0359	0.0675	0.0764
72	0.0041	0.0057	0.0043	0.0045	0.0022	0.0019	0.0061	0.0018	0.0049	0.0041
73	0.0387	0.0712	0.0510	0.0592	0.0332	0.0243	0.0679	0.0379	0.0604	0.1059
74	0.0041	0.0041	0.0031	0.0039	0.0187	0.0087	0.0030	0.0045	0.0098	0.0049
75	0.0015	0.0025	0.0018	0.0020	0.0012	0.0011	0.3295	0.0013	0.0029	0.0034
76	0.0015	0.0022	0.0017	0.0017	0.0021	0.0014	0.0025	0.0012	0.0018	0.0139
77	0.0046	0.0062	0.0048	0.0065	0.0052	0.0064	0.0059	0.0242	0.0130	0.0280
78	0.0061	0.0050	0.0044	0.0054	0.0314	0.0035	0.0046	0.1645	0.0088	0.0092
79	2.2975	2.1366	1.7835	2.0939	1.6278	1.2683	1.7760	1.9569	1.4798	1.7764

MATRIX . : OBE INVERSE

COLUMN	71	72	73	74	75	76	77	78	79
ROW									
1	0.0191	0.0051	0.0059	0.0028	0.0104	0.0081	0.0024	0.0019	2.8598
2	0.0277	0.0060	0.0057	0.0031	0.0082	0.0082	0.0028	0.0024	3.4243
3	0.0006	0.0005	0.0008	0.0003	0.0004	0.0004	0.0002	0.0011	1.3360
4	0.0017	0.0004	0.0004	0.0004	0.0006	0.0005	0.0002	0.0003	1.2452
5	0.0005	0.0006	0.0005	0.0015	0.0003	0.0003	0.0002	0.0009	1.4271
6	0.0005	0.0008	0.0006	0.0012	0.0004	0.0003	0.0002	0.0008	1.6249
7	0.0010	0.0016	0.0019	0.0020	0.0012	0.0020	0.0143	0.0176	1.6134
8	0.0080	0.0098	0.0071	0.0104	0.0062	0.0078	0.0065	0.0240	2.5426
9	0.0020	0.0012	0.0008	0.0018	0.0007	0.0008	0.0004	0.0036	1.3201
10	0.0004	0.0006	0.0007	0.0005	0.0006	0.0003	0.0002	0.0010	1.2145
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0000
12	0.0945	0.0213	0.0132	0.0137	0.0289	0.0338	0.0167	0.1934	2.5675
13	0.0001	0.0002	0.0002	0.0003	0.0002	0.0001	0.0001	0.0001	1.1137
14	0.0073	0.0106	0.0149	0.0059	0.0151	0.0211	0.0056	0.0044	2.9734
15	0.0002	0.0006	0.0010	0.0003	0.0011	0.0006	0.0004	0.0002	1.3465
16	0.0012	0.0133	0.0021	0.0037	0.0010	0.0014	0.0021	0.0011	3.5925
17	0.0005	0.0030	0.0012	0.0023	0.0005	0.0006	0.0013	0.0006	1.7303
18	0.0008	0.0060	0.0005	0.0013	0.0004	0.0005	0.0003	0.0006	1.4064
19	0.0002	0.0069	0.0004	0.0022	0.0002	0.0008	0.0013	0.0005	1.2685
20	0.0064	0.0041	0.0072	0.0029	0.0031	0.0034	0.0019	0.0119	3.2367
21	0.0002	0.0002	0.0001	0.0002	0.0001	0.0001	0.0000	0.0001	1.1069
22	0.0001	0.0002	0.0001	0.0002	0.0001	0.0001	0.0000	0.0001	1.1144
23	0.0001	0.0001	0.0003	0.0001	0.0001	0.0001	0.0000	0.0001	1.0562
24	0.0054	0.0137	0.0559	0.0074	0.0097	0.0115	0.0068	0.0109	3.3787
25	0.0012	0.0051	0.0051	0.0033	0.0017	0.0022	0.0010	0.0016	1.8937
26	0.0105	0.0141	0.2393	0.0090	0.0273	0.0275	0.0107	0.0145	2.5440
27	0.0104	0.0172	0.0199	0.0136	0.0190	0.0101	0.0046	0.0225	4.8404
28	0.0021	0.0059	0.0040	0.0080	0.0020	0.0020	0.0018	0.0029	2.6166
29	0.0014	0.0191	0.0050	0.0011	0.0014	0.0203	0.0014	0.0014	1.3893
30	0.0045	0.0022	0.0018	0.0086	0.0016	0.0018	0.0010	0.0089	1.4097
31	0.0136	0.0169	0.0110	0.0191	0.0096	0.0105	0.0110	0.0208	2.6941
32	0.0030	0.0106	0.0054	0.0293	0.0028	0.0043	0.0036	0.0048	2.5781
33	0.0001	0.0034	0.0002	0.0001	0.0003	0.0001	0.0001	0.0001	1.4933
34	0.0002	0.0106	0.0004	0.0002	0.0011	0.0002	0.0002	0.0001	1.0796
35	0.0010	0.0023	0.0008	0.0090	0.0009	0.0012	0.0004	0.0015	1.4181
36	0.0034	0.0067	0.0019	0.0140	0.0014	0.0016	0.0011	0.0087	1.8589
37	0.0069	0.0093	0.0071	0.0282	0.0043	0.0044	0.0040	0.0143	7.0263
38	0.0044	0.0091	0.0055	0.0144	0.0037	0.0031	0.0019	0.0080	4.6249
39	0.0008	0.0011	0.0009	0.0011	0.0007	0.0012	0.0003	0.0010	1.2924
40	0.0036	0.0011	0.0008	0.0012	0.0011	0.0012	0.0007	0.0061	1.4912
41	0.0009	0.0028	0.0015	0.0175	0.0008	0.0009	0.0008	0.0013	1.8902
42	0.0030	0.0076	0.0039	0.0148	0.0019	0.0022	0.0015	0.0052	2.5992
43	0.0004	0.0005	0.0037	0.0044	0.0004	0.0003	0.0006	0.0008	1.4482
44	0.0005	0.0003	0.0029	0.0004	0.0003	0.0002	0.0001	0.0003	1.2001
45	0.0008	0.0004	0.0008	0.0007	0.0003	0.0003	0.0006	0.0017	1.3805
46	0.0007	0.0003	0.0003	0.0003	0.0002	0.0003	0.0001	0.0012	1.1929
47	0.0006	0.0011	0.0014	0.0039	0.0004	0.0004	0.0004	0.0008	1.7378
48	0.0013	0.0006	0.0011	0.0007	0.0005	0.0004	0.0002	0.0005	1.2956
49	0.0010	0.0011	0.0014	0.0027	0.0005	0.0005	0.0005	0.0014	1.9562
50	0.0004	0.0006	0.0007	0.0134	0.0003	0.0003	0.0004	0.0007	1.5698
51	0.0011	0.0007	0.0109	0.0006	0.0009	0.0005	0.0003	0.0006	1.3364
52	0.0009	0.0007	0.0035	0.0012	0.0005	0.0005	0.0003	0.0016	1.2587

MATRIX : OBE INVERSE

COLUMN / ROW	71	72	73	74	75	76	77	78	79
53	0.0015	0.0053	0.0051	0.0039	0.0011	0.0010	0.0007	0.0024	2.0085
54	0.0009	0.0108	0.0010	0.0009	0.0007	0.0005	0.0004	0.0014	1.3170
55	0.0011	0.0019	0.0007	0.0026	0.0006	0.0006	0.0005	0.0052	1.3287
56	0.0006	0.0024	0.0018	0.0018	0.0009	0.0011	0.0004	0.0007	1.5961
57	0.0006	0.0293	0.0017	0.0013	0.0007	0.0008	0.0004	0.0005	1.6502
58	0.0005	0.0009	0.0015	0.0206	0.0005	0.0005	0.0007	0.0010	1.2986
59	0.0017	0.0028	0.0023	0.1199	0.0014	0.0017	0.0037	0.0030	2.3337
60	0.0005	0.0008	0.0008	0.0011	0.0005	0.0005	0.0010	0.0005	1.8360
61	0.0005	0.0011	0.0010	0.0005	0.0003	0.0003	0.0010	0.0013	1.2568
62	0.0009	0.0014	0.0009	0.0018	0.0006	0.0082	0.0003	0.0012	1.4240
63	0.0007	0.0099	0.0083	0.0007	0.0197	0.0030	0.0005	0.0008	1.2081
64	0.0016	0.0253	0.0141	0.0017	0.0081	0.0035	0.0011	0.0025	1.4540
65	0.0148	0.0264	0.0332	0.0261	0.0275	0.0218	0.1304	0.0318	4.9390
66	0.0059	0.0132	0.0342	0.0115	0.0136	0.0158	0.0046	0.0093	1.8948
67	0.0022	0.0029	0.0663	0.0019	0.0045	0.0027	0.0017	0.0032	1.2946
68	0.0096	0.0271	0.0273	0.0213	0.0240	0.0418	0.0186	0.1299	3.7184
69	0.0320	0.0479	0.0431	0.1369	0.0377	0.0326	0.0178	0.0336	5.6927
70	0.0440	0.0261	0.0195	0.0276	0.0300	0.0151	0.0092	0.0258	2.7833
71	1.0472	0.0736	0.0698	0.0464	0.1339	0.0965	0.0338	0.0240	4.3134
72	0.0037	1.0300	0.0118	0.0030	0.0071	0.0082	0.0027	0.0019	1.3376
73	0.0335	0.0467	1.0649	0.0308	0.0716	0.0357	0.0273	0.0513	4.6264
74	0.0035	0.0104	0.0078	1.0070	0.0052	0.0064	0.0056	0.0048	1.4173
75	0.0030	0.0020	0.0268	0.0012	1.2413	0.0030	0.0011	0.0015	1.7235
76	0.0019	0.0038	0.0029	0.0014	0.0042	1.0103	0.0007	0.0020	1.1746
77	0.0064	0.0062	0.0249	0.0042	0.0084	0.0107	1.0022	0.0057	1.4745
78	0.0100	0.0059	0.0059	0.0187	0.0056	0.0078	0.0066	1.0187	1.7235
79	1.4860	1.6723	1.9403	1.7802	1.8249	1.5314	1.3866	1.7747	161.4416

MATRIX : MRIO INVERSE

COLUMN / ROW	1	2	3	4	5	6	7	8	9	10
1	1.3098	0.0966	0.0195	0.1515	0.0008	0.0013	0.0011	0.0010	0.0013	0.0010
2	0.4172	1.0605	0.0110	0.0517	0.0007	0.0011	0.0010	0.0009	0.0011	0.0009
3	0.0013	0.0006	1.0207	0.0009	0.0004	0.0013	0.0012	0.0003	0.0003	0.0003
4	0.0381	0.0425	0.0441	1.0046	0.0001	0.0002	0.0002	0.0001	0.0001	0.0001
5	0.0006	0.0007	0.0008	0.0008	1.0399	0.0024	0.0022	0.0005	0.0019	0.0021
6	0.0005	0.0007	0.0005	0.0008	0.0038	1.2100	0.0007	0.0004	0.0008	0.0010
7	0.0015	0.0013	0.0008	0.0011	0.0059	0.0039	1.1866	0.0008	0.0036	0.0043
8	0.0151	0.0213	0.0120	0.0047	0.0084	0.0079	0.0096	1.0303	0.0136	0.0117
9	0.0022	0.0043	0.0004	0.0007	0.0041	0.0008	0.0007	0.0012	1.0095	0.0085
10	0.0012	0.0027	0.0002	0.0003	0.0004	0.0010	0.0005	0.0002	0.0005	1.0471
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0259	0.0273	0.0045	0.0081	0.0138	0.0144	0.0145	0.0515	0.0131	0.0132
13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
14	0.2154	0.0197	0.0406	0.0531	0.0027	0.0042	0.0035	0.0033	0.0038	0.0032
15	0.0002	0.0002	0.0004	0.0003	0.0002	0.0003	0.0002	0.0002	0.0003	0.0002
16	0.0020	0.0023	0.0100	0.0067	0.0005	0.0011	0.0010	0.0003	0.0018	0.0012
17	0.0026	0.0030	0.0408	0.0259	0.0004	0.0007	0.0010	0.0004	0.0018	0.0004
18	0.0004	0.0003	0.0006	0.0006	0.0002	0.0003	0.0003	0.0002	0.0003	0.0003
19	0.0021	0.0021	0.0019	0.0009	0.0001	0.0002	0.0002	0.0001	0.0002	0.0001
20	0.0039	0.0044	0.0020	0.0075	0.0038	0.0130	0.0126	0.0031	0.0020	0.0024
21	0.0022	0.0043	0.0005	0.0086	0.0001	0.0001	0.0001	0.0000	0.0001	0.0001
22	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
23	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
24	0.0104	0.0052	0.0057	0.0289	0.0022	0.0035	0.0034	0.0022	0.0068	0.0062
25	0.0072	0.0040	0.0049	0.0538	0.0008	0.0014	0.0015	0.0007	0.0019	0.0011
26	0.0039	0.0021	0.0020	0.0017	0.0014	0.0017	0.0016	0.0013	0.0016	0.0015
27	0.0357	0.0724	0.0091	0.0124	0.0218	0.0583	0.0261	0.0135	0.0285	0.0351
28	0.0025	0.0023	0.0084	0.0061	0.0015	0.0025	0.0036	0.0010	0.0073	0.0015
29	0.0054	0.0009	0.0006	0.0011	0.0003	0.0004	0.0004	0.0003	0.0004	0.0006
30	0.0016	0.0016	0.0036	0.0011	0.0008	0.0011	0.0011	0.0028	0.0011	0.0009
31	0.0311	0.0452	0.0263	0.0093	0.0146	0.0108	0.0155	0.0102	0.0242	0.0156
32	0.0062	0.0066	0.0035	0.0033	0.0069	0.0101	0.0178	0.0029	0.0391	0.0053
33	0.0002	0.0001	0.0001	0.0004	0.0000	0.0001	0.0001	0.0000	0.0001	0.0001
34	0.0005	0.0001	0.0002	0.0018	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001
35	0.0031	0.0006	0.0015	0.0009	0.0003	0.0004	0.0006	0.0005	0.0005	0.0004
36	0.0020	0.0030	0.0012	0.0013	0.0037	0.0030	0.0030	0.0055	0.0036	0.0019
37	0.0083	0.0074	0.0147	0.0150	0.0272	0.0419	0.0398	0.0086	0.0341	0.0389
38	0.0033	0.0037	0.0063	0.0092	0.0050	0.0075	0.0074	0.0036	0.0089	0.0104
39	0.0059	0.0020	0.0138	0.0015	0.0004	0.0008	0.0005	0.0004	0.0006	0.0006
40	0.0009	0.0009	0.0007	0.0003	0.0009	0.0021	0.0011	0.0032	0.0018	0.0017
41	0.0025	0.0009	0.0014	0.0014	0.0009	0.0016	0.0021	0.0007	0.0022	0.0015
42	0.0069	0.0065	0.0145	0.0796	0.0031	0.0066	0.0093	0.0030	0.0058	0.0040
43	0.0006	0.0009	0.0005	0.0002	0.0075	0.0106	0.0191	0.0017	0.0214	0.0090
44	0.0040	0.0095	0.0001	0.0005	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
45	0.0003	0.0004	0.0001	0.0001	0.0180	0.0249	0.0399	0.0025	0.0251	0.0260
46	0.0002	0.0003	0.0001	0.0001	0.0004	0.0032	0.0005	0.0003	0.0088	0.0074
47	0.0004	0.0005	0.0006	0.0009	0.0021	0.0031	0.0048	0.0005	0.0025	0.0019
48	0.0005	0.0008	0.0004	0.0005	0.0003	0.0007	0.0004	0.0002	0.0004	0.0004
49	0.0008	0.0014	0.0012	0.0005	0.0020	0.0034	0.0049	0.0028	0.0156	0.0057
50	0.0007	0.0009	0.0005	0.0004	0.0010	0.0289	0.0069	0.0003	0.0058	0.0040
51	0.0001	0.0001	0.0000	0.0000	0.0001	0.0001	0.0001	0.0000	0.0001	0.0000
52	0.0003	0.0003	0.0001	0.0001	0.0002	0.0002	0.0002	0.0004	0.0003	0.0002

MATRIX : MRIO INVERSE

COLUMN / ROW	1	2	3	4	5	6	7	8	9	10
53	0.0007	0.0008	0.0013	0.0007	0.0011	0.0021	0.0054	0.0080	0.0060	0.0094
54	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0002	0.0003	0.0001	0.0001
55	0.0005	0.0005	0.0218	0.0002	0.0004	0.0008	0.0055	0.0007	0.0009	0.0019
56	0.0002	0.0002	0.0002	0.0002	0.0002	0.0003	0.0002	0.0005	0.0002	0.0002
57	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0016	0.0003	0.0003
58	0.0012	0.0015	0.0021	0.0003	0.0007	0.0009	0.0012	0.0004	0.0017	0.0008
59	0.0024	0.0022	0.0014	0.0008	0.0034	0.0036	0.0064	0.0013	0.0126	0.0033
60	0.0004	0.0002	0.0003	0.0005	0.0007	0.0002	0.0002	0.0002	0.0002	0.0005
61	0.0005	0.0004	0.0134	0.0003	0.0009	0.0019	0.0046	0.0003	0.0003	0.0011
62	0.0003	0.0002	0.0006	0.0002	0.0005	0.0007	0.0003	0.0007	0.0004	0.0003
63	0.0004	0.0004	0.0002	0.0002	0.0003	0.0003	0.0003	0.0002	0.0003	0.0002
64	0.0008	0.0007	0.0011	0.0009	0.0005	0.0015	0.0006	0.0006	0.0006	0.0005
65	0.0569	0.0290	0.0438	0.0368	0.1049	0.0397	0.0358	0.0346	0.0324	0.0760
66	0.0078	0.0064	0.0022	0.0031	0.0037	0.0045	0.0044	0.0029	0.0033	0.0072
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
68	0.0195	0.0193	0.0060	0.0086	0.0292	0.0483	0.0431	0.0162	0.0457	0.0739
69	0.0772	0.0507	0.0485	0.0453	0.0260	0.0352	0.0391	0.0232	0.0413	0.0341
70	0.0234	0.0227	0.0072	0.0111	0.0129	0.0300	0.0213	0.0172	0.0232	0.0168
71	0.0634	0.0969	0.0116	0.0387	0.0898	0.0444	0.0438	0.2007	0.0342	0.0284
72	0.0018	0.0011	0.0021	0.0022	0.0009	0.0015	0.0014	0.0012	0.0015	0.0011
73	0.0400	0.0466	0.0105	0.0141	0.0329	0.0234	0.0241	0.0183	0.0231	0.0203
74	0.0091	0.0083	0.0056	0.0028	0.0032	0.0035	0.0051	0.0050	0.0111	0.0037
75	0.0003	0.0002	0.0004	0.0004	0.0002	0.0003	0.0003	0.0002	0.0003	0.0002
76	0.0099	0.0018	0.0006	0.0016	0.0010	0.0015	0.0015	0.0009	0.0008	0.0033
77	0.0026	0.0024	0.0012	0.0015	0.0025	0.0028	0.0025	0.0021	0.0022	0.0040
78	0.0003	0.0002	0.0003	0.0002	0.0006	0.0009	0.0005	0.0004	0.0013	0.0015
79	2.5078	1.7686	1.5166	1.7325	1.5266	1.7417	1.6972	1.5020	1.5486	1.5690

MATRIX : MRIO INVERSE

COLUMN / ROW	11	12	13	14	15	16	17	18	19	20
1	0.0028	0.0024	0.0015	0.3391	0.0204	0.0282	0.0785	0.0116	0.0157	0.0036
2	0.0073	0.0019	0.0013	0.2091	0.2117	0.1681	0.0613	0.0577	0.0477	0.0024
3	0.0073	0.0049	0.0006	0.0059	0.0004	0.0006	0.0008	0.0084	0.0008	0.1250
4	0.0008	0.0005	0.0001	0.0141	0.0085	0.0071	0.0038	0.0029	0.0023	0.0055
5	0.0045	0.0023	0.0021	0.0011	0.0003	0.0009	0.0007	0.0005	0.0005	0.0009
6	0.0040	0.0023	0.0046	0.0005	0.0003	0.0009	0.0008	0.0006	0.0005	0.0006
7	0.0040	0.0021	0.0018	0.0025	0.0012	0.0042	0.0032	0.0022	0.0020	0.0016
8	0.0140	0.0180	0.0035	0.0108	0.0056	0.0092	0.0073	0.0055	0.0049	0.0079
9	0.0161	0.0159	0.0005	0.0017	0.0011	0.0014	0.0009	0.0007	0.0006	0.0010
10	0.0005	0.0005	0.0002	0.0009	0.0007	0.0022	0.0016	0.0010	0.0009	0.0004
11	1.0000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0095	1.0080	0.0051	0.0167	0.0088	0.0141	0.0123	0.0096	0.0090	0.0108
13	0.0001	0.0000	1.0261	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
14	0.0068	0.0082	0.0049	1.2698	0.0080	0.0154	0.0267	0.0102	0.0094	0.0088
15	0.0004	0.0004	0.0004	0.0003	1.3121	0.0003	0.0003	0.0003	0.0003	0.0003
16	0.0036	0.0016	0.0018	0.0026	0.0008	1.5027	0.2492	0.5036	0.3902	0.0026
17	0.0038	0.0012	0.0011	0.0018	0.0008	0.0520	1.0851	0.0243	0.1225	0.0054
18	0.0014	0.0013	0.0012	0.0013	0.0002	0.0008	0.0104	1.2164	0.0073	0.0026
19	0.0006	0.0002	0.0001	0.0026	0.0005	0.0016	0.0236	0.0206	1.0966	0.0004
20	0.0819	0.0545	0.0057	0.0062	0.0036	0.0040	0.0051	0.0035	0.0068	1.4254
21	0.0003	0.0002	0.0010	0.0025	0.0018	0.0008	0.0004	0.0004	0.0003	0.0003
22	0.0054	0.0000	0.0007	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000
23	0.0029	0.0002	0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
24	0.0114	0.0098	0.0050	0.0352	0.0208	0.0233	0.0349	0.0172	0.0172	0.0064
25	0.0041	0.0033	0.0030	0.0242	0.0186	0.0126	0.0152	0.0149	0.0159	0.0042
26	0.0025	0.0021	0.0026	0.0124	0.0132	0.0025	0.0024	0.0027	0.0022	0.0020
27	0.0183	0.0230	0.0102	0.0267	0.0225	0.1106	0.0856	0.0496	0.0443	0.0220
28	0.0057	0.0072	0.0050	0.0048	0.0151	0.1375	0.1853	0.0729	0.0684	0.0049
29	0.0011	0.0008	0.0006	0.0046	0.0017	0.0054	0.0045	0.0031	0.0021	0.0006
30	0.0073	0.0450	0.0007	0.0019	0.0007	0.0018	0.0011	0.0011	0.0009	0.0080
31	0.0282	0.0380	0.0060	0.0209	0.0113	0.0157	0.0124	0.0092	0.0081	0.0148
32	0.0131	0.0113	0.0198	0.0086	0.0022	0.0070	0.0184	0.0066	0.0392	0.0032
33	0.0002	0.0001	0.0001	0.0002	0.0001	0.0002	0.0002	0.0035	0.0001	0.0003
34	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001
35	0.0035	0.0062	0.0012	0.0147	0.0003	0.0057	0.0016	0.0022	0.0018	0.0024
36	0.1022	0.0252	0.0014	0.0018	0.0009	0.0014	0.0010	0.0009	0.0007	0.0083
37	0.0836	0.0412	0.0396	0.0199	0.0045	0.0060	0.0054	0.0046	0.0046	0.0163
38	0.0510	0.0279	0.0591	0.0042	0.0022	0.0038	0.0038	0.0036	0.0037	0.0065
39	0.0011	0.0034	0.0003	0.0281	0.0023	0.0021	0.0021	0.0012	0.0010	0.0025
40	0.0966	0.0298	0.0003	0.0006	0.0003	0.0007	0.0005	0.0004	0.0004	0.0005
41	0.0057	0.0033	0.0049	0.0047	0.0004	0.0006	0.0007	0.0007	0.0005	0.0018
42	0.0259	0.0194	0.0106	0.0077	0.0098	0.0035	0.0033	0.0036	0.0030	0.0259
43	0.0015	0.0009	0.0003	0.0006	0.0004	0.0005	0.0004	0.0003	0.0003	0.0004
44	0.0003	0.0001	0.0001	0.0021	0.0020	0.0016	0.0006	0.0006	0.0005	0.0001
45	0.0051	0.0045	0.0003	0.0003	0.0002	0.0004	0.0003	0.0002	0.0002	0.0002
46	0.0047	0.0055	0.0003	0.0003	0.0002	0.0005	0.0004	0.0004	0.0003	0.0007
47	0.0023	0.0014	0.0068	0.0005	0.0003	0.0005	0.0004	0.0003	0.0003	0.0006
48	0.0006	0.0005	0.0002	0.0011	0.0004	0.0106	0.0060	0.0042	0.0033	0.0048
49	0.0060	0.0041	0.0039	0.0008	0.0004	0.0012	0.0009	0.0007	0.0005	0.0009
50	0.0018	0.0011	0.0085	0.0007	0.0003	0.0004	0.0003	0.0003	0.0003	0.0005
51	0.0002	0.0001	0.0002	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001
52	0.0076	0.0067	0.0002	0.0003	0.0003	0.0002	0.0002	0.0002	0.0002	0.0002

MATRIX : MRIO INVERSE

COLUMN / ROW	11	12	13	14	15	16	17	18	19	20
53	0.0097	0.0057	0.0064	0.0008	0.0006	0.0010	0.0008	0.0007	0.0005	0.0009
54	0.0030	0.0052	0.0001	0.0002	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001
55	0.0185	0.0101	0.0008	0.0005	0.0002	0.0003	0.0003	0.0004	0.0002	0.0029
56	0.0016	0.0013	0.0448	0.0002	0.0002	0.0002	0.0002	0.0003	0.0002	0.0002
57	0.0007	0.0006	0.0227	0.0003	0.0002	0.0002	0.0002	0.0003	0.0002	0.0002
58	0.0018	0.0014	0.0037	0.0009	0.0004	0.0005	0.0004	0.0004	0.0003	0.0008
59	0.0025	0.0026	0.0007	0.0021	0.0007	0.0011	0.0010	0.0008	0.0008	0.0017
60	0.0004	0.0003	0.1137	0.0005	0.0001	0.0003	0.0003	0.0002	0.0002	0.0004
61	0.0007	0.0004	0.0002	0.0007	0.0002	0.0004	0.0004	0.0004	0.0003	0.0021
62	0.0045	0.0044	0.0070	0.0004	0.0002	0.0006	0.0005	0.0009	0.0006	0.0007
63	0.0007	0.0004	0.0036	0.0007	0.0007	0.0006	0.0005	0.0007	0.0005	0.0005
64	0.0028	0.0051	0.0011	0.0011	0.0007	0.0015	0.0136	0.0264	0.0036	0.0010
65	0.0670	0.0492	0.0200	0.0722	0.0201	0.0487	0.0513	0.0335	0.0325	0.0650
66	0.0088	0.0083	0.0121	0.0086	0.0036	0.0075	0.0077	0.0097	0.0082	0.0067
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
68	0.0230	0.0182	0.0136	0.0236	0.0091	0.0331	0.0252	0.0207	0.0196	0.0201
69	0.1117	0.1072	0.0306	0.0782	0.0277	0.0786	0.0951	0.0787	0.0840	0.0515
70	0.0188	0.0185	0.0101	0.0207	0.0101	0.0169	0.0155	0.0164	0.0156	0.0188
71	0.0267	0.0252	0.0138	0.0424	0.0280	0.0349	0.0285	0.0342	0.0271	0.0220
72	0.0027	0.0025	0.0040	0.0049	0.0036	0.0023	0.0027	0.0025	0.0031	0.0016
73	0.0689	0.0327	0.0308	0.0619	0.0713	0.0382	0.0361	0.0374	0.0300	0.0292
74	0.0074	0.0080	0.0029	0.0080	0.0027	0.0040	0.0036	0.0033	0.0030	0.0065
75	0.0005	0.0005	0.0004	0.0003	0.0003	0.0003	0.0003	0.0004	0.0004	0.0003
76	0.0019	0.0020	0.0019	0.0037	0.0008	0.0013	0.0016	0.0015	0.0013	0.0011
77	0.0034	0.0026	0.0033	0.0036	0.0044	0.0034	0.0035	0.0055	0.0040	0.0024
78	0.0008	0.0008	0.0002	0.0007	0.0002	0.0006	0.0005	0.0004	0.0004	0.0005
79	2.0582	1.7621	1.6045	2.4549	1.9044	2.4475	2.2502	2.3610	2.1750	1.9821

MATRIX : MRIO INVERSE

COLUMN	21	22	23	24	25	26	27	28	29	30
ROW										
1	0.0024	0.0063	0.0037	0.0059	0.0032	0.0040	0.0053	0.0035	0.0129	0.0175
2	0.0019	0.0129	0.0031	0.0050	0.0027	0.0033	0.0049	0.0029	0.0095	0.0116
3	0.0392	0.0177	0.0100	0.0096	0.0041	0.0022	0.0028	0.0013	0.0010	0.0011
4	0.0019	0.0015	0.0007	0.0008	0.0004	0.0004	0.0005	0.0003	0.0007	0.0009
5	0.0057	0.0025	0.0067	0.0007	0.0006	0.0005	0.0073	0.0023	0.0015	0.0035
6	0.0006	0.0020	0.0021	0.0007	0.0009	0.0006	0.0086	0.0026	0.0010	0.0032
7	0.0036	0.0029	0.0048	0.0103	0.0050	0.0028	0.0082	0.0078	0.0025	0.0039
8	0.0068	0.0061	0.0060	0.0107	0.0101	0.0058	0.0124	0.0078	0.0065	0.0261
9	0.0009	0.0010	0.0020	0.0059	0.0027	0.0014	0.0033	0.0014	0.0015	0.0036
10	0.0003	0.0006	0.0005	0.0023	0.0014	0.0010	0.0212	0.0062	0.0022	0.0046
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0110	0.0104	0.0100	0.0121	0.0118	0.0131	0.0130	0.0113	0.0102	0.0129
13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
14	0.0070	0.0095	0.0073	0.0199	0.0107	0.0133	0.0186	0.0124	0.0453	0.0645
15	0.0004	0.0004	0.0003	0.0003	0.0003	0.0007	0.0003	0.0003	0.0006	0.0007
16	0.0021	0.0912	0.0091	0.0118	0.0056	0.0035	0.0015	0.0016	0.0025	0.0014
17	0.0019	0.0351	0.0211	0.0034	0.0016	0.0028	0.0006	0.0004	0.0017	0.0005
18	0.0035	0.0032	0.0025	0.0015	0.0020	0.0005	0.0009	0.0010	0.0009	0.0011
19	0.0002	0.0011	0.0006	0.0003	0.0002	0.0002	0.0013	0.0004	0.0003	0.0005
20	0.4466	0.2009	0.1129	0.1066	0.0453	0.0230	0.0073	0.0073	0.0049	0.0040
21	1.0329	0.0004	0.0005	0.0002	0.0001	0.0001	0.0004	0.0004	0.0005	0.0007
22	0.0000	1.0181	0.0024	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
23	0.0000	0.0000	1.0225	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
24	0.0064	0.0154	0.0153	1.2300	0.5045	0.2234	0.0201	0.0516	0.0313	0.0179
25	0.0056	0.0188	0.0210	0.0351	1.0448	0.0119	0.0086	0.0110	0.0309	0.0138
26	0.0022	0.0028	0.0029	0.0053	0.0051	1.1298	0.0026	0.0024	0.0091	0.0060
27	0.0114	0.0320	0.0227	0.0641	0.0520	0.0472	1.2221	0.3523	0.1096	0.2646
28	0.0023	0.0287	0.0154	0.0213	0.0169	0.0083	0.0049	1.0187	0.0078	0.0900
29	0.0007	0.0013	0.0009	0.0019	0.0012	0.0011	0.0013	0.0037	1.0618	0.0056
30	0.0030	0.0251	0.0207	0.0014	0.0010	0.0026	0.0024	0.0012	0.0022	1.0031
31	0.0119	0.0106	0.0100	0.0178	0.0186	0.0099	0.0150	0.0113	0.0113	0.0539
32	0.0025	0.0655	0.0524	0.0165	0.0086	0.0093	0.0024	0.0028	0.0359	0.0028
33	0.0004	0.0015	0.0016	0.0004	0.0002	0.0002	0.0004	0.0002	0.0001	0.0002
34	0.0001	0.0002	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0002	0.0002
35	0.0010	0.0083	0.0235	0.0007	0.0005	0.0006	0.0012	0.0007	0.0213	0.0012
36	0.0033	0.0028	0.0113	0.0030	0.0016	0.0012	0.0033	0.0014	0.0029	0.0040
37	0.1130	0.0456	0.1328	0.0079	0.0056	0.0044	0.0218	0.0090	0.0177	0.0420
38	0.0072	0.0232	0.0259	0.0045	0.0077	0.0037	0.0207	0.0074	0.0054	0.0221
39	0.0010	0.0024	0.0019	0.0014	0.0010	0.0010	0.0120	0.0061	0.0234	0.0649
40	0.0005	0.0004	0.0004	0.0005	0.0005	0.0005	0.0007	0.0005	0.0004	0.0005
41	0.0032	0.0034	0.0125	0.0007	0.0005	0.0005	0.0009	0.0005	0.0047	0.0014
42	0.0162	0.0735	0.0435	0.0185	0.0118	0.0058	0.0091	0.0041	0.0099	0.0044
43	0.0005	0.0004	0.0004	0.0006	0.0005	0.0004	0.0008	0.0005	0.0008	0.0006
44	0.0001	0.0002	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0005	0.0002
45	0.0003	0.0003	0.0005	0.0007	0.0004	0.0003	0.0013	0.0006	0.0004	0.0006
46	0.0009	0.0005	0.0005	0.0008	0.0006	0.0004	0.0009	0.0006	0.0003	0.0005
47	0.0007	0.0012	0.0011	0.0006	0.0004	0.0003	0.0008	0.0004	0.0005	0.0006
48	0.0058	0.0018	0.0010	0.0040	0.0037	0.0035	0.0116	0.0035	0.0013	0.0027
49	0.0013	0.0009	0.0016	0.0032	0.0016	0.0009	0.0018	0.0010	0.0006	0.0010
50	0.0012	0.0008	0.0033	0.0004	0.0004	0.0003	0.0008	0.0004	0.0006	0.0008
51	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0004	0.0001
52	0.0002	0.0002	0.0003	0.0002	0.0002	0.0003	0.0002	0.0002	0.0006	0.0003

MATRIX : MRIO INVERSE

COLUMN / ROW	21	22	23	24	25	26	27	28	29	30
53	0.0014	0.0012	0.0017	0.0009	0.0008	0.0007	0.0024	0.0010	0.0012	0.0013
54	0.0002	0.0002	0.0001	0.0002	0.0002	0.0002	0.0002	0.0001	0.0002	0.0003
55	0.0011	0.0007	0.0015	0.0005	0.0003	0.0003	0.0004	0.0003	0.0006	0.0003
56	0.0003	0.0003	0.0003	0.0002	0.0002	0.0004	0.0002	0.0002	0.0003	0.0004
57	0.0003	0.0003	0.0002	0.0003	0.0003	0.0003	0.0002	0.0002	0.0004	0.0004
58	0.0006	0.0005	0.0004	0.0004	0.0004	0.0004	0.0004	0.0003	0.0004	0.0004
59	0.0016	0.0012	0.0011	0.0011	0.0011	0.0011	0.0010	0.0008	0.0009	0.0011
60	0.0006	0.0003	0.0003	0.0004	0.0004	0.0003	0.0003	0.0003	0.0003	0.0004
61	0.0012	0.0006	0.0005	0.0007	0.0006	0.0004	0.0005	0.0004	0.0004	0.0005
62	0.0009	0.0007	0.0007	0.0004	0.0005	0.0005	0.0003	0.0003	0.0009	0.0004
63	0.0006	0.0007	0.0006	0.0005	0.0006	0.0101	0.0004	0.0005	0.0013	0.0007
64	0.0012	0.0021	0.0016	0.0009	0.0010	0.0029	0.0008	0.0008	0.0016	0.0013
65	0.0883	0.0539	0.0483	0.0690	0.0693	0.0426	0.0525	0.0452	0.0425	0.0593
66	0.0081	0.0098	0.0107	0.0072	0.0091	0.0169	0.0074	0.0076	0.0098	0.0104
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
68	0.0240	0.0217	0.0240	0.0417	0.0287	0.0203	0.0577	0.0346	0.0200	0.0280
69	0.0555	0.0734	0.0619	0.0573	0.0513	0.0456	0.0485	0.0494	0.0569	0.0783
70	0.0170	0.0208	0.0239	0.0156	0.0138	0.0177	0.0143	0.0138	0.0157	0.0184
71	0.0252	0.0392	0.0305	0.0218	0.0260	0.0761	0.0205	0.0201	0.0290	0.0310
72	0.0028	0.0030	0.0026	0.0034	0.0042	0.0059	0.0027	0.0027	0.0075	0.0078
73	0.0277	0.0422	0.0361	0.0343	0.0379	0.0510	0.0379	0.0445	0.1724	0.0532
74	0.0057	0.0044	0.0041	0.0036	0.0038	0.0045	0.0031	0.0027	0.0035	0.0040
75	0.0004	0.0004	0.0004	0.0003	0.0003	0.0007	0.0004	0.0003	0.0006	0.0007
76	0.0013	0.0015	0.0016	0.0012	0.0014	0.0028	0.0012	0.0011	0.0016	0.0018
77	0.0028	0.0038	0.0039	0.0029	0.0031	0.0149	0.0028	0.0026	0.0067	0.0041
78	0.0005	0.0004	0.0004	0.0008	0.0005	0.0006	0.0008	0.0006	0.0005	0.0005
79	2.0412	2.0752	1.9101	1.9157	2.0549	1.8645	1.7433	1.7939	1.8731	2.0730

MATRIX : MRIO INVERSE

COLUMN / ROW	31	32	33	34	35	36	37	38	39	40
1	0.0016	0.0054	0.1997	0.0409	0.0018	0.0023	0.0012	0.0016	0.0020	0.0020
2	0.0013	0.0072	0.0951	0.0262	0.0016	0.0030	0.0010	0.0015	0.0016	0.0017
3	0.0005	0.0009	0.0023	0.0023	0.0031	0.0009	0.0005	0.0006	0.0006	0.0006
4	0.0002	0.0005	0.0072	0.0019	0.0003	0.0003	0.0002	0.0002	0.0002	0.0002
5	0.0007	0.0012	0.0008	0.0006	0.0008	0.0036	0.0628	0.0027	0.0260	0.0151
6	0.0008	0.0012	0.0006	0.0006	0.0013	0.0009	0.0037	0.1165	0.0035	0.0098
7	0.0021	0.0038	0.0050	0.0022	0.0040	0.0142	0.0306	0.0040	0.0134	0.0083
8	0.4839	0.0057	0.0094	0.0049	0.0083	0.0120	0.0103	0.0103	0.0080	0.0070
9	0.0046	0.0018	0.0011	0.0007	0.0164	0.0889	0.0046	0.0028	0.0022	0.0019
10	0.0008	0.0020	0.0018	0.0007	0.0017	0.0019	0.0012	0.0006	0.0008	0.0005
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0474	0.0096	0.0134	0.0087	0.0120	0.0141	0.0167	0.0123	0.0122	0.0108
13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
14	0.0056	0.0082	0.4076	0.0790	0.0057	0.0066	0.0039	0.0049	0.0068	0.0066
15	0.0002	0.0004	0.0003	0.0004	0.0003	0.0004	0.0002	0.0003	0.0003	0.0004
16	0.0005	0.0391	0.0013	0.0625	0.0024	0.0054	0.0011	0.0033	0.0013	0.0016
17	0.0004	0.0411	0.0010	0.0414	0.0014	0.0033	0.0005	0.0020	0.0006	0.0010
18	0.0004	0.0021	0.0006	0.0074	0.0021	0.0018	0.0015	0.0012	0.0016	0.0019
19	0.0001	0.0011	0.0010	0.0109	0.0003	0.0028	0.0001	0.0002	0.0001	0.0002
20	0.0041	0.0076	0.0052	0.0210	0.0337	0.0086	0.0048	0.0063	0.0056	0.0063
21	0.0001	0.0005	0.0015	0.0012	0.0044	0.0003	0.0002	0.0003	0.0003	0.0013
22	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
23	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
24	0.0110	0.0229	0.0175	0.0237	0.0298	0.0276	0.0042	0.0071	0.0211	0.0087
25	0.0045	0.0206	0.0137	0.0235	0.0527	0.0072	0.0023	0.0028	0.0210	0.0076
26	0.0024	0.0023	0.0059	0.0036	0.0024	0.0024	0.0021	0.0018	0.0432	0.0025
27	0.0415	0.1131	0.0670	0.0331	0.0671	0.0335	0.0315	0.0328	0.0293	0.0213
28	0.0013	0.1818	0.0033	0.0317	0.0064	0.0124	0.0017	0.0158	0.0060	0.0036
29	0.0032	0.0014	0.0547	0.0127	0.0007	0.0036	0.0005	0.0005	0.0014	0.0013
30	0.0027	0.0019	0.0012	0.0011	0.0029	0.0010	0.0012	0.0010	0.0291	0.0114
31	1.0899	0.0085	0.0169	0.0083	0.0097	0.0188	0.0161	0.0154	0.0130	0.0116
32	0.0027	1.0496	0.0066	0.0982	0.0261	0.0127	0.0036	0.0042	0.0058	0.0038
33	0.0002	0.0002	1.2280	0.2194	0.0002	0.0006	0.0004	0.0003	0.0003	0.0003
34	0.0001	0.0001	0.0002	1.0299	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002
35	0.0006	0.0032	0.0059	0.0021	1.0695	0.0005	0.0003	0.0004	0.0004	0.0092
36	0.0052	0.0018	0.0025	0.0012	0.0294	1.1268	0.0035	0.0055	0.0020	0.0043
37	0.0103	0.0122	0.0097	0.0090	0.0086	0.0270	1.2633	0.0158	0.5198	0.2989
38	0.0071	0.0066	0.0033	0.0048	0.0114	0.0090	0.0427	1.5308	0.0418	0.1263
39	0.0074	0.0020	0.0108	0.0025	0.0010	0.0007	0.0006	0.0006	1.0026	0.0012
40	0.0023	0.0004	0.0005	0.0003	0.0009	0.0019	0.0007	0.0007	0.0005	1.0214
41	0.0006	0.0016	0.0020	0.0010	0.0009	0.0012	0.0082	0.0039	0.0111	0.0172
42	0.0031	0.0078	0.0058	0.0124	0.0032	0.0150	0.0218	0.0082	0.0118	0.0425
43	0.0012	0.0004	0.0005	0.0003	0.0007	0.0028	0.0014	0.0014	0.0008	0.0007
44	0.0001	0.0002	0.0010	0.0004	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
45	0.0015	0.0003	0.0004	0.0002	0.0008	0.0085	0.0024	0.0027	0.0011	0.0009
46	0.0006	0.0005	0.0005	0.0004	0.0006	0.0026	0.0009	0.0009	0.0006	0.0006
47	0.0004	0.0010	0.0003	0.0004	0.0015	0.0022	0.0021	0.0090	0.0025	0.0061
48	0.0005	0.0022	0.0010	0.0011	0.0010	0.0005	0.0015	0.0010	0.0010	0.0006
49	0.0018	0.0007	0.0008	0.0005	0.0009	0.0035	0.0076	0.0055	0.0035	0.0081
50	0.0004	0.0011	0.0004	0.0004	0.0004	0.0012	0.0101	0.0146	0.0045	0.0036
51	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
52	0.0005	0.0002	0.0003	0.0002	0.0002	0.0003	0.0010	0.0002	0.0006	0.0075

MATRIX : MRIO INVERSE

COLUMN / ROW	31	32	33	34	35	36	37	38	39	40
53	0.0042	0.0007	0.0007	0.0007	0.0007	0.0016	0.0088	0.0038	0.0040	0.0158
54	0.0003	0.0002	0.0001	0.0001	0.0001	0.0002	0.0002	0.0001	0.0002	0.0002
55	0.0006	0.0002	0.0004	0.0003	0.0004	0.0022	0.0005	0.0007	0.0004	0.0005
56	0.0004	0.0002	0.0002	0.0002	0.0002	0.0003	0.0002	0.0002	0.0002	0.0003
57	0.0009	0.0002	0.0002	0.0003	0.0002	0.0003	0.0004	0.0003	0.0003	0.0007
58	0.0005	0.0003	0.0006	0.0003	0.0003	0.0008	0.0005	0.0005	0.0004	0.0005
59	0.0013	0.0012	0.0014	0.0009	0.0010	0.0028	0.0013	0.0011	0.0011	0.0010
60	0.0005	0.0003	0.0003	0.0002	0.0003	0.0005	0.0005	0.0003	0.0004	0.0003
61	0.0006	0.0003	0.0005	0.0003	0.0004	0.0007	0.0007	0.0006	0.0006	0.0004
62	0.0005	0.0004	0.0005	0.0008	0.0005	0.0005	0.0015	0.0005	0.0009	0.0070
63	0.0004	0.0005	0.0006	0.0008	0.0005	0.0005	0.0004	0.0004	0.0009	0.0008
64	0.0008	0.0026	0.0010	0.0192	0.0028	0.0027	0.0024	0.0017	0.0016	0.0016
65	0.0755	0.0413	0.0549	0.0373	0.0453	0.0858	0.0821	0.0534	0.0695	0.0516
66	0.0049	0.0073	0.0082	0.0089	0.0069	0.0091	0.0087	0.0079	0.0077	0.0111
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
68	0.0360	0.0272	0.0287	0.0183	0.0615	0.0567	0.0489	0.0540	0.0340	0.0292
69	0.0395	0.0535	0.0831	0.0665	0.0549	0.0464	0.0524	0.0593	0.0615	0.0582
70	0.0251	0.0132	0.0210	0.0173	0.0159	0.0193	0.0202	0.0172	0.0211	0.0174
71	0.1225	0.0210	0.0391	0.0268	0.0213	0.0229	0.0207	0.0211	0.0255	0.0273
72	0.0018	0.0035	0.0029	0.0028	0.0028	0.0026	0.0020	0.0019	0.0028	0.0057
73	0.0414	0.0424	0.0481	0.0484	0.0383	0.0379	0.0306	0.0282	0.0418	0.0350
74	0.0045	0.0028	0.0051	0.0033	0.0032	0.0067	0.0036	0.0030	0.0034	0.0036
75	0.0002	0.0004	0.0003	0.0004	0.0004	0.0004	0.0003	0.0003	0.0004	0.0004
76	0.0010	0.0013	0.0027	0.0017	0.0011	0.0015	0.0012	0.0011	0.0012	0.0015
77	0.0032	0.0031	0.0037	0.0061	0.0032	0.0031	0.0027	0.0026	0.0032	0.0032
78	0.0005	0.0005	0.0009	0.0004	0.0005	0.0007	0.0007	0.0006	0.0005	0.0004
79	2.1255	1.8085	2.5209	2.0984	1.6939	1.8009	1.8687	2.1151	2.1458	1.9726

MATRIX : MRIO INVERSE

COLUMN / ROW	41	42	43	44	45	46	47	48	49	50
1	0.0015	0.0022	0.0015	0.0028	0.0017	0.0017	0.0017	0.0020	0.0017	0.0019
2	0.0013	0.0019	0.0013	0.0021	0.0015	0.0017	0.0014	0.0017	0.0014	0.0018
3	0.0013	0.0010	0.0004	0.0007	0.0004	0.0004	0.0004	0.0008	0.0005	0.0004
4	0.0002	0.0002	0.0002	0.0003	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
5	0.0129	0.0082	0.0079	0.0110	0.0117	0.0084	0.0062	0.0070	0.0080	0.0066
6	0.0075	0.0083	0.0064	0.0030	0.0030	0.0035	0.0032	0.0040	0.0052	0.0058
7	0.0073	0.0052	0.0057	0.0070	0.0070	0.0051	0.0039	0.0043	0.0049	0.0041
8	0.0067	0.0056	0.0063	0.0063	0.0059	0.0058	0.0054	0.0071	0.0067	0.0051
9	0.0017	0.0020	0.0017	0.0016	0.0015	0.0011	0.0017	0.0012	0.0017	0.0018
10	0.0005	0.0006	0.0003	0.0004	0.0004	0.0004	0.0003	0.0003	0.0003	0.0003
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0092	0.0083	0.0078	0.0088	0.0087	0.0084	0.0077	0.0094	0.0080	0.0099
13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
14	0.0050	0.0061	0.0050	0.0079	0.0054	0.0054	0.0055	0.0060	0.0055	0.0063
15	0.0003	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0005
16	0.0017	0.0032	0.0014	0.0021	0.0019	0.0039	0.0013	0.0026	0.0014	0.0029
17	0.0009	0.0065	0.0006	0.0014	0.0013	0.0017	0.0005	0.0013	0.0006	0.0007
18	0.0020	0.0019	0.0016	0.0019	0.0017	0.0016	0.0019	0.0018	0.0017	0.0024
19	0.0001	0.0003	0.0002	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001
20	0.0138	0.0103	0.0038	0.0070	0.0040	0.0032	0.0035	0.0082	0.0050	0.0036
21	0.0007	0.0007	0.0006	0.0008	0.0006	0.0002	0.0003	0.0004	0.0005	0.0008
22	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
23	0.0000	0.0000	0.0000	0.0008	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
24	0.0135	0.0111	0.0063	0.0072	0.0055	0.0058	0.0052	0.0054	0.0064	0.0064
25	0.0131	0.0125	0.0062	0.0065	0.0041	0.0040	0.0038	0.0033	0.0046	0.0062
26	0.0021	0.0022	0.0022	0.0028	0.0024	0.0026	0.0022	0.0025	0.0023	0.0023
27	0.0227	0.0298	0.0120	0.0171	0.0146	0.0147	0.0106	0.0134	0.0127	0.0112
28	0.0096	0.0060	0.0027	0.0060	0.0055	0.0074	0.0022	0.0050	0.0026	0.0026
29	0.0012	0.0011	0.0007	0.0010	0.0007	0.0007	0.0008	0.0012	0.0007	0.0010
30	0.0063	0.0083	0.0013	0.0065	0.0041	0.0043	0.0014	0.0016	0.0015	0.0008
31	0.0111	0.0088	0.0111	0.0105	0.0098	0.0101	0.0093	0.0132	0.0118	0.0081
32	0.0141	0.0148	0.0061	0.0247	0.0243	0.0339	0.0061	0.0135	0.0067	0.0060
33	0.0002	0.0004	0.0002	0.0062	0.0003	0.0002	0.0002	0.0015	0.0008	0.0002
34	0.0001	0.0012	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
35	0.0006	0.0015	0.0004	0.0007	0.0005	0.0005	0.0003	0.0006	0.0005	0.0003
36	0.0057	0.0106	0.0117	0.0069	0.0064	0.0037	0.0134	0.0050	0.0105	0.0132
37	0.2562	0.1595	0.1560	0.2194	0.2340	0.1671	0.1217	0.1382	0.1583	0.1298
38	0.0965	0.1070	0.0831	0.0378	0.0375	0.0443	0.0414	0.0518	0.0674	0.0757
39	0.0008	0.0010	0.0004	0.0008	0.0006	0.0006	0.0004	0.0005	0.0004	0.0004
40	0.0004	0.0004	0.0024	0.0012	0.0110	0.0061	0.0050	0.0193	0.0082	0.0006
41	1.0231	0.0119	0.0293	0.0350	0.0164	0.0174	0.0125	0.0116	0.0092	0.0098
42	0.0166	1.0440	0.0183	0.0219	0.0279	0.0185	0.0103	0.0227	0.0257	0.0265
43	0.0005	0.0005	1.0894	0.0523	0.0333	0.0093	0.0006	0.0082	0.0037	0.0004
44	0.0001	0.0001	0.0001	1.0503	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
45	0.0008	0.0007	0.0006	0.0006	1.0429	0.0005	0.0005	0.0005	0.0006	0.0005
46	0.0005	0.0005	0.0040	0.0006	0.0006	1.0718	0.0011	0.0005	0.0005	0.0006
47	0.0091	0.0109	0.0336	0.0210	0.0374	0.0195	1.0820	0.0237	0.0210	0.0406
48	0.0014	0.0006	0.0004	0.0005	0.0005	0.0004	0.0004	1.0648	0.0004	0.0003
49	0.0028	0.0030	0.0379	0.0998	0.0674	0.0576	0.0413	0.0536	1.0835	0.0049
50	0.0030	0.0024	0.0338	0.0354	0.0080	0.0238	0.0015	0.0049	0.0021	1.1128
51	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001
52	0.0003	0.0003	0.0003	0.0005	0.0004	0.0003	0.0003	0.0004	0.0003	0.0003

MATRIX : MRIO INVERSE

COLUMN / ROW	41	42	43	44	45	46	47	48	49	50
53	0.0031	0.0058	0.0162	0.0085	0.0184	0.0445	0.0306	0.0352	0.0257	0.0046
54	0.0001	0.0001	0.0001	0.0015	0.0001	0.0001	0.0001	0.0002	0.0001	0.0002
55	0.0006	0.0004	0.0006	0.0046	0.0004	0.0006	0.0004	0.0005	0.0008	0.0003
56	0.0002	0.0002	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
57	0.0002	0.0007	0.0007	0.0006	0.0006	0.0011	0.0008	0.0009	0.0022	0.0003
58	0.0003	0.0003	0.0186	0.0119	0.0020	0.0034	0.0003	0.0005	0.0006	0.0066
59	0.0008	0.0008	0.0042	0.0131	0.0038	0.0009	0.0007	0.0008	0.0008	0.0008
60	0.0003	0.0002	0.0002	0.0003	0.0003	0.0003	0.0007	0.0002	0.0002	0.0002
61	0.0004	0.0003	0.0003	0.0007	0.0003	0.0003	0.0002	0.0003	0.0003	0.0003
62	0.0007	0.0006	0.0040	0.0028	0.0012	0.0010	0.0009	0.0027	0.0074	0.0007
63	0.0005	0.0005	0.0005	0.0008	0.0005	0.0005	0.0005	0.0005	0.0005	0.0006
64	0.0012	0.0029	0.0012	0.0014	0.0013	0.0012	0.0012	0.0012	0.0012	0.0013
65	0.0444	0.0382	0.0364	0.0495	0.0416	0.0394	0.0288	0.0340	0.0336	0.0351
66	0.0092	0.0078	0.0083	0.0091	0.0088	0.0098	0.0083	0.0091	0.0091	0.0085
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
68	0.0283	0.0264	0.0213	0.0245	0.0243	0.0197	0.0205	0.0199	0.0226	0.0237
69	0.0446	0.0483	0.0544	0.0673	0.0573	0.0578	0.0451	0.0563	0.0487	0.0446
70	0.0171	0.0155	0.0121	0.0194	0.0208	0.0159	0.0145	0.0167	0.0131	0.0183
71	0.0230	0.0215	0.0137	0.0198	0.0192	0.0226	0.0190	0.0399	0.0184	0.0257
72	0.0026	0.0028	0.0029	0.0037	0.0031	0.0031	0.0034	0.0032	0.0030	0.0034
73	0.0317	0.0329	0.0322	0.0473	0.0317	0.0332	0.0299	0.0308	0.0314	0.0330
74	0.0027	0.0028	0.0031	0.0036	0.0032	0.0033	0.0026	0.0030	0.0029	0.0028
75	0.0003	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0005
76	0.0013	0.0013	0.0014	0.0016	0.0015	0.0017	0.0015	0.0017	0.0015	0.0016
77	0.0029	0.0029	0.0030	0.0040	0.0033	0.0035	0.0030	0.0035	0.0032	0.0032
78	0.0004	0.0004	0.0005	0.0005	0.0004	0.0003	0.0003	0.0003	0.0004	0.0003
79	1.8045	1.7380	1.8405	2.0375	1.8991	1.8437	1.6347	1.7882	1.7245	1.7340

MATRIX : MRIO INVERSE

COLUMN	51	52	53	54	55	56	57	58	59	60
ROW										
1	0.0023	0.0019	0.0021	0.0024	0.0024	0.0021	0.0023	0.0019	0.0022	0.0022
2	0.0019	0.0017	0.0019	0.0024	0.0021	0.0019	0.0020	0.0019	0.0025	0.0020
3	0.0003	0.0007	0.0005	0.0008	0.0006	0.0006	0.0005	0.0004	0.0005	0.0003
4	0.0002	0.0002	0.0002	0.0003	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
5	0.0017	0.0058	0.0050	0.0064	0.0064	0.0015	0.0019	0.0029	0.0098	0.0029
6	0.0027	0.0070	0.0084	0.0070	0.0097	0.0035	0.0057	0.0140	0.0043	0.0066
7	0.0017	0.0040	0.0038	0.0048	0.0037	0.0016	0.0022	0.0028	0.0063	0.0023
8	0.0036	0.0054	0.0066	0.0058	0.0096	0.0041	0.0049	0.0049	0.0063	0.0053
9	0.0006	0.0016	0.0018	0.0022	0.0022	0.0007	0.0018	0.0015	0.0018	0.0009
10	0.0002	0.0005	0.0005	0.0006	0.0006	0.0003	0.0006	0.0008	0.0005	0.0002
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0078	0.0080	0.0080	0.0082	0.0082	0.0065	0.0082	0.0066	0.0101	0.0073
13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0025	0.0000	0.0000	0.0000	0.0001
14	0.0075	0.0056	0.0067	0.0071	0.0071	0.0066	0.0077	0.0059	0.0051	0.0071
15	0.0006	0.0004	0.0005	0.0004	0.0005	0.0005	0.0005	0.0004	0.0003	0.0005
16	0.0017	0.0029	0.0029	0.0064	0.0032	0.0033	0.0023	0.0040	0.0104	0.0028
17	0.0014	0.0033	0.0020	0.0032	0.0046	0.0015	0.0013	0.0023	0.0091	0.0011
18	0.0014	0.0016	0.0018	0.0017	0.0020	0.0018	0.0022	0.0016	0.0017	0.0018
19	0.0001	0.0002	0.0002	0.0002	0.0002	0.0001	0.0002	0.0002	0.0166	0.0002
20	0.0027	0.0076	0.0046	0.0084	0.0057	0.0065	0.0048	0.0036	0.0051	0.0031
21	0.0006	0.0034	0.0007	0.0020	0.0007	0.0007	0.0006	0.0007	0.0006	0.0005
22	0.0000	0.0000	0.0000	0.0000	0.0000	0.0169	0.0000	0.0000	0.0001	0.0007
23	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0033
24	0.0090	0.0101	0.0147	0.0154	0.0159	0.0111	0.0231	0.0098	0.0064	0.0057
25	0.0038	0.0101	0.0062	0.0188	0.0237	0.0065	0.0103	0.0116	0.0051	0.0033
26	0.0027	0.0024	0.0040	0.0038	0.0023	0.0052	0.0026	0.0019	0.0021	0.0029
27	0.0109	0.0211	0.0213	0.0290	0.0271	0.0139	0.0332	0.0407	0.0196	0.0104
28	0.0054	0.0079	0.0091	0.0185	0.0191	0.0092	0.0113	0.0154	0.0113	0.0053
29	0.0006	0.0007	0.0007	0.0009	0.0008	0.0007	0.0008	0.0006	0.0007	0.0008
30	0.0015	0.0082	0.0045	0.0107	0.0065	0.0016	0.0020	0.0010	0.0089	0.0022
31	0.0062	0.0092	0.0115	0.0093	0.0179	0.0069	0.0077	0.0075	0.0106	0.0092
32	0.0186	0.0274	0.0180	0.0599	0.0327	0.0160	0.0229	0.0467	0.0393	0.0100
33	0.0001	0.0002	0.0002	0.0004	0.0002	0.0001	0.0001	0.0002	0.0002	0.0002
34	0.0001	0.0002	0.0001	0.0009	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002
35	0.0034	0.0021	0.0022	0.0034	0.0377	0.0098	0.0339	0.0016	0.0156	0.0014
36	0.0018	0.0107	0.0127	0.0162	0.0121	0.0028	0.0093	0.0095	0.0065	0.0051
37	0.0315	0.1133	0.0961	0.1241	0.0904	0.0270	0.0332	0.0503	0.1941	0.0551
38	0.0352	0.0908	0.1082	0.0893	0.1252	0.0449	0.0723	0.1814	0.0546	0.0855
39	0.0004	0.0010	0.0007	0.0013	0.0010	0.0005	0.0007	0.0007	0.0010	0.0005
40	0.0006	0.0024	0.0028	0.0009	0.0005	0.0003	0.0004	0.0005	0.0008	0.0005
41	0.0202	0.0364	0.0172	0.0403	0.0300	0.0264	0.0312	0.0125	0.0550	0.0192
42	0.0182	0.0480	0.0252	0.0484	0.0264	0.0219	0.0202	0.0164	0.0507	0.0222
43	0.0003	0.0016	0.0038	0.0008	0.0006	0.0004	0.0003	0.0005	0.0051	0.0007
44	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
45	0.0002	0.0005	0.0006	0.0006	0.0006	0.0002	0.0004	0.0006	0.0006	0.0004
46	0.0002	0.0004	0.0004	0.0004	0.0004	0.0003	0.0003	0.0004	0.0005	0.0004
47	0.0100	0.0108	0.0150	0.0140	0.0104	0.0119	0.0100	0.0131	0.0249	0.0305
48	0.0002	0.0005	0.0005	0.0007	0.0009	0.0003	0.0005	0.0006	0.0006	0.0003
49	0.0071	0.0153	0.0118	0.0085	0.0026	0.0021	0.0013	0.0166	0.0137	0.0100
50	0.0007	0.0020	0.0029	0.0032	0.0021	0.0042	0.0011	0.0023	0.0187	0.0540
51	1.2029	0.0001	0.0001	0.0002	0.0001	0.0038	0.0001	0.0001	0.0001	0.0003
52	0.0002	1.0609	0.0002	0.0230	0.0002	0.0003	0.0002	0.0002	0.0082	0.0004

MATRIX ··: MRIO INVERSE

COLUMN	51	52	53	54	55	56	57	58	59	60
ROW										
53	0.0185	0.0807	1.0763	0.0513	0.0247	0.0205	0.0030	0.0181	0.0055	0.0057
54	0.0002	0.0001	0.0002	1.0153	0.0002	0.0002	0.0002	0.0001	0.0001	0.0002
55	0.0101	0.0059	0.0077	0.0113	1.0348	0.0094	0.0045	0.0093	0.0075	0.0016
56	0.0007	0.0003	0.0016	0.0003	0.0003	1.0675	0.0012	0.0003	0.0046	0.0434
57	0.0773	0.0020	0.0196	0.0016	0.0010	0.1733	1.0498	0.0047	0.0024	0.0185
58	0.0006	0.0121	0.0024	0.0010	0.0325	0.0021	0.0004	1.0463	0.0135	0.0036
59	0.0006	0.0008	0.0008	0.0009	0.0009	0.0008	0.0008	0.0028	1.4955	0.0009
60	0.0002	0.0002	0.0002	0.0003	0.0003	0.0014	0.0002	0.0002	0.0004	1.1881
61	0.0002	0.0003	0.0003	0.0004	0.0004	0.0002	0.0003	0.0003	0.0004	0.0003
62	0.0006	0.0164	0.0020	0.0245	0.0006	0.0010	0.0006	0.0010	0.0097	0.0194
63	0.0005	0.0005	0.0005	0.0008	0.0005	0.0008	0.0006	0.0004	0.0007	0.0040
64	0.0014	0.0032	0.0014	0.0120	0.0013	0.0012	0.0015	0.0015	0.0014	0.0013
65	0.0240	0.0363	0.0356	0.0429	0.0421	0.0256	0.0301	0.0348	0.0527	0.0298
66	0.0109	0.0087	0.0089	0.0085	0.0080	0.0109	0.0096	0.0070	0.0075	0.0133
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
68	0.0130	0.0210	0.0234	0.0254	0.0250	0.0155	0.0225	0.0231	0.0246	0.0197
69	0.0415	0.0657	0.0511	0.0661	0.0663	0.0542	0.0572	0.0610	0.0623	0.0430
70	0.0143	0.0125	0.0157	0.0138	0.0119	0.0110	0.0123	0.0112	0.0149	0.0118
71	0.0261	0.0195	0.0212	0.0219	0.0230	0.0234	0.0220	0.0175	0.0179	0.0176
72	0.0034	0.0025	0.0034	0.0031	0.0033	0.0033	0.0040	0.0030	0.0026	0.0064
73	0.0342	0.0315	0.0292	0.0744	0.0395	0.0436	0.0364	0.0280	0.0371	0.0415
74	0.0026	0.0029	0.0030	0.0031	0.0031	0.0033	0.0030	0.0027	0.0170	0.0036
75	0.0006	0.0004	0.0005	0.0005	0.0005	0.0005	0.0006	0.0004	0.0003	0.0005
76	0.0016	0.0014	0.0016	0.0013	0.0014	0.0020	0.0018	0.0012	0.0011	0.0023
77	0.0035	0.0031	0.0029	0.0048	0.0031	0.0040	0.0033	0.0025	0.0036	0.0037
78	0.0003	0.0004	0.0004	0.0005	0.0004	0.0003	0.0004	0.0004	0.0005	0.0004
79	1.7184	1.8845	1.7585	2.0000	1.8822	1.7680	1.6459	1.7773	2.4326	1.8686

MATRIX : MRIO INVERSE

COLUMN	61	62	63	64	65	66	67	68	69	70
ROW										
1	0.0028	0.0042	0.0021	0.0043	0.0024	0.0010	0.0047	0.0009	0.0017	0.0023
2	0.0025	0.0063	0.0019	0.0074	0.0019	0.0008	0.0033	0.0007	0.0013	0.0019
3	0.0046	0.0005	0.0006	0.0042	0.0003	0.0002	0.0002	0.0003	0.0002	0.0003
4	0.0004	0.0004	0.0002	0.0006	0.0002	0.0001	0.0003	0.0001	0.0015	0.0002
5	0.0102	0.0028	0.0015	0.0027	0.0007	0.0001	0.0001	0.0002	0.0001	0.0001
6	0.0053	0.0057	0.0045	0.0050	0.0004	0.0002	0.0001	0.0002	0.0001	0.0001
7	0.0063	0.0023	0.0032	0.0029	0.0012	0.0006	0.0007	0.0316	0.0009	0.0014
8	0.0065	0.0046	0.0040	0.0060	0.0237	0.0051	0.0033	0.0840	0.0079	0.0049
9	0.0017	0.0010	0.0011	0.0015	0.0009	0.0006	0.0003	0.0008	0.0004	0.0004
10	0.0004	0.0004	0.0016	0.0007	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0096	0.0078	0.0072	0.0097	0.0394	0.0326	0.0125	0.0442	0.0117	0.0142
13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
14	0.0068	0.0129	0.0070	0.0096	0.0079	0.0034	0.0130	0.0029	0.0050	0.0079
15	0.0004	0.0006	0.0004	0.0004	0.0002	0.0003	0.0010	0.0002	0.0004	0.0006
16	0.0067	0.0234	0.0028	0.0289	0.0009	0.0004	0.0003	0.0004	0.0005	0.0005
17	0.0106	0.0027	0.0011	0.0115	0.0010	0.0002	0.0002	0.0002	0.0004	0.0003
18	0.0025	0.0024	0.0013	0.0034	0.0007	0.0005	0.0002	0.0005	0.0002	0.0002
19	0.0047	0.0002	0.0002	0.0005	0.0002	0.0001	0.0001	0.0001	0.0002	0.0001
20	0.0519	0.0046	0.0050	0.0392	0.0032	0.0022	0.0012	0.0030	0.0022	0.0028
21	0.0004	0.0008	0.0002	0.0007	0.0001	0.0000	0.0001	0.0000	0.0004	0.0000
22	0.0066	0.0000	0.0000	0.0027	0.0001	0.0002	0.0001	0.0000	0.0000	0.0000
23	0.0013	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
24	0.0088	0.0124	0.0349	0.0408	0.0040	0.0037	0.0036	0.0024	0.0128	0.0209
25	0.0040	0.0092	0.0097	0.0235	0.0014	0.0005	0.0008	0.0005	0.0058	0.0013
26	0.0024	0.0035	0.0024	0.0034	0.0040	0.0036	0.0056	0.0017	0.0040	0.0278
27	0.0174	0.0177	0.0863	0.0364	0.0065	0.0023	0.0057	0.0055	0.0032	0.0041
28	0.0104	0.0109	0.0089	0.0425	0.0020	0.0008	0.0006	0.0007	0.0013	0.0010
29	0.0008	0.0009	0.0007	0.0012	0.0006	0.0003	0.0007	0.0003	0.0009	0.0009
30	0.0072	0.0023	0.0007	0.0094	0.0022	0.0016	0.0007	0.0021	0.0007	0.0008
31	0.0110	0.0076	0.0062	0.0105	0.0500	0.0093	0.0045	0.0144	0.0142	0.0065
32	0.0197	0.0269	0.0168	0.0441	0.0077	0.0023	0.0015	0.0018	0.0030	0.0018
33	0.0003	0.0005	0.0005	0.0037	0.0000	0.0000	0.0001	0.0000	0.0000	0.0001
34	0.0002	0.0008	0.0018	0.0026	0.0001	0.0001	0.0004	0.0000	0.0002	0.0001
35	0.0057	0.0056	0.0140	0.0061	0.0008	0.0005	0.0004	0.0004	0.0006	0.0003
36	0.0082	0.0045	0.0039	0.0051	0.0020	0.0011	0.0005	0.0016	0.0008	0.0006
37	0.2014	0.0531	0.0207	0.0482	0.0142	0.0023	0.0017	0.0041	0.0018	0.0018
38	0.0678	0.0727	0.0530	0.0627	0.0052	0.0026	0.0014	0.0025	0.0011	0.0013
39	0.0009	0.0035	0.0011	0.0014	0.0007	0.0003	0.0004	0.0003	0.0003	0.0003
40	0.0415	0.0004	0.0003	0.0004	0.0015	0.0010	0.0004	0.0015	0.0004	0.0005
41	0.0115	0.0201	0.0049	0.0120	0.0013	0.0007	0.0004	0.0004	0.0006	0.0003
42	0.0374	0.0223	0.0094	0.0207	0.0051	0.0012	0.0009	0.0015	0.0013	0.0011
43	0.0293	0.0005	0.0004	0.0004	0.0022	0.0002	0.0003	0.0008	0.0003	0.0004
44	0.0001	0.0002	0.0001	0.0002	0.0001	0.0001	0.0002	0.0001	0.0002	0.0003
45	0.0023	0.0004	0.0004	0.0004	0.0003	0.0002	0.0001	0.0014	0.0001	0.0002
46	0.0008	0.0003	0.0003	0.0004	0.0003	0.0002	0.0001	0.0003	0.0001	0.0001
47	0.0093	0.0134	0.0008	0.0010	0.0013	0.0003	0.0002	0.0003	0.0002	0.0002
48	0.0007	0.0005	0.0010	0.0009	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002
49	0.0466	0.0048	0.0008	0.0010	0.0013	0.0002	0.0002	0.0006	0.0002	0.0002
50	0.0092	0.0013	0.0015	0.0012	0.0012	0.0003	0.0001	0.0003	0.0002	0.0002
51	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0003
52	0.0031	0.0003	0.0002	0.0005	0.0004	0.0003	0.0003	0.0004	0.0003	0.0004

MATRIX . MRIO INVERSE

COLUMN / ROW	61	62	63	64	65	66	67	68	69	70
53	0.0342	0.0173	0.0064	0.0057	0.0019	0.0006	0.0006	0.0012	0.0005	0.0006
54	0.0093	0.0002	0.0001	0.0002	0.0003	0.0002	0.0003	0.0003	0.0002	0.0002
55	0.0036	0.0064	0.0024	0.0023	0.0010	0.0005	0.0003	0.0016	0.0006	0.0003
56	0.0007	0.0004	0.0003	0.0004	0.0006	0.0138	0.0042	0.0002	0.0003	0.0006
57	0.0011	0.0173	0.0017	0.0035	0.0013	0.0023	0.0009	0.0002	0.0002	0.0003
58	0.0023	0.0011	0.0003	0.0004	0.0030	0.0005	0.0003	0.0004	0.0008	0.0004
59	0.0134	0.0008	0.0007	0.0009	0.0070	0.0016	0.0006	0.0009	0.0020	0.0009
60	0.0003	0.0008	0.0002	0.0003	0.0068	0.0001	0.0001	0.0002	0.0001	0.0001
61	1.0858	0.0003	0.0003	0.0004	0.0078	0.0001	0.0002	0.0004	0.0002	0.0002
62	0.0022	1.0747	0.0004	0.0006	0.0005	0.0002	0.0002	0.0003	0.0001	0.0003
63	0.0006	0.0042	1.0423	0.0014	0.0005	0.0006	0.0064	0.0003	0.0006	0.0025
64	0.0022	0.0046	0.0010	1.0804	0.0009	0.0011	0.0027	0.0006	0.0013	0.0040
65	0.0503	0.0306	0.0295	0.0413	1.1003	0.0095	0.0217	0.0356	0.0184	0.0189
66	0.0082	0.0123	0.0096	0.0097	0.0129	1.0088	0.0496	0.0051	0.0128	0.0336
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0057	0.0000	0.0000	0.0000
68	0.0252	0.0181	0.0173	0.0208	0.0148	0.0160	0.0211	1.2342	0.0253	0.0321
69	0.0624	0.0566	0.0499	0.0710	0.0422	0.0171	0.0267	0.0171	1.0259	0.0242
70	0.0159	0.0147	0.0116	0.0152	0.0271	0.0129	0.0225	0.0153	0.0234	1.2246
71	0.0223	0.0243	0.0223	0.0294	0.0389	0.0250	0.0646	0.0292	0.0642	0.0732
72	0.0034	0.0045	0.0035	0.0037	0.0018	0.0017	0.0054	0.0011	0.0041	0.0031
73	0.0340	0.0612	0.0456	0.0534	0.0301	0.0233	0.0655	0.0278	0.0563	0.1026
74	0.0035	0.0032	0.0027	0.0034	0.0184	0.0086	0.0027	0.0035	0.0093	0.0046
75	0.0005	0.0006	0.0004	0.0005	0.0003	0.0004	0.3278	0.0002	0.0013	0.0006
76	0.0013	0.0018	0.0014	0.0015	0.0019	0.0013	0.0024	0.0008	0.0016	0.0137
77	0.0033	0.0045	0.0035	0.0050	0.0039	0.0059	0.0043	0.0046	0.0066	0.0258
78	0.0005	0.0004	0.0004	0.0004	0.0016	0.0006	0.0004	0.0005	0.0008	0.0006
79	2.0868	1.7414	1.5816	1.8743	1.5282	1.2375	1.7111	1.5980	1.3465	1.6807

MATRIX : MRIO INVERSE

COLUMN / ROW	71	72	73	74	75	76	77	78	79
1	0.0005	0.0031	0.0029	0.0013	0.0075	0.0058	0.0016	0.0010	2.5014
2	0.0008	0.0033	0.0023	0.0012	0.0043	0.0051	0.0014	0.0011	2.5961
3	0.0005	0.0004	0.0002	0.0002	0.0003	0.0004	0.0002	0.0010	1.3098
4	0.0002	0.0003	0.0002	0.0003	0.0004	0.0004	0.0001	0.0002	1.2050
5	0.0002	0.0004	0.0002	0.0013	0.0002	0.0002	0.0002	0.0007	1.3656
6	0.0002	0.0006	0.0002	0.0010	0.0003	0.0002	0.0001	0.0006	1.5394
7	0.0004	0.0013	0.0010	0.0014	0.0009	0.0018	0.0142	0.0172	1.5512
8	0.0022	0.0081	0.0040	0.0086	0.0045	0.0064	0.0057	0.0216	2.2079
9	0.0015	0.0011	0.0003	0.0015	0.0006	0.0007	0.0004	0.0034	1.2698
10	0.0001	0.0003	0.0001	0.0002	0.0003	0.0002	0.0001	0.0006	1.1294
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0000
12	0.0904	0.0197	0.0075	0.0097	0.0272	0.0320	0.0153	0.1895	2.3081
13	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0300
14	0.0015	0.0091	0.0099	0.0041	0.0136	0.0197	0.0051	0.0034	2.7283
15	0.0001	0.0005	0.0008	0.0003	0.0010	0.0006	0.0004	0.0002	1.3417
16	0.0002	0.0108	0.0006	0.0025	0.0006	0.0009	0.0016	0.0007	3.0796
17	0.0002	0.0025	0.0003	0.0019	0.0003	0.0004	0.0011	0.0004	1.6171
18	0.0001	0.0056	0.0002	0.0010	0.0002	0.0003	0.0002	0.0005	1.3402
19	0.0000	0.0067	0.0001	0.0021	0.0001	0.0007	0.0013	0.0004	1.2141
20	0.0050	0.0034	0.0014	0.0020	0.0024	0.0028	0.0016	0.0111	2.9729
21	0.0000	0.0001	0.0001	0.0002	0.0001	0.0001	0.0000	0.0001	1.0899
22	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0549
23	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0319
24	0.0018	0.0106	0.0079	0.0049	0.0058	0.0091	0.0052	0.0079	2.9367
25	0.0004	0.0046	0.0014	0.0028	0.0012	0.0018	0.0008	0.0012	1.7855
26	0.0013	0.0035	0.0123	0.0019	0.0116	0.0195	0.0047	0.0033	1.4707
27	0.0051	0.0137	0.0072	0.0101	0.0167	0.0076	0.0034	0.0201	4.0289
28	0.0008	0.0045	0.0009	0.0065	0.0011	0.0013	0.0014	0.0020	2.2821
29	0.0002	0.0185	0.0041	0.0005	0.0008	0.0199	0.0012	0.0009	1.2642
30	0.0041	0.0020	0.0008	0.0082	0.0014	0.0016	0.0008	0.0086	1.3387
31	0.0043	0.0146	0.0061	0.0169	0.0069	0.0086	0.0102	0.0184	2.1660
32	0.0018	0.0095	0.0020	0.0280	0.0021	0.0037	0.0033	0.0041	2.2649
33	0.0000	0.0033	0.0001	0.0001	0.0003	0.0001	0.0001	0.0000	1.4822
34	0.0000	0.0105	0.0002	0.0001	0.0011	0.0002	0.0002	0.0001	1.0596
35	0.0006	0.0020	0.0005	0.0088	0.0007	0.0011	0.0004	0.0014	1.3665
36	0.0023	0.0061	0.0009	0.0129	0.0010	0.0012	0.0008	0.0080	1.6244
37	0.0040	0.0067	0.0035	0.0239	0.0029	0.0032	0.0033	0.0120	6.0002
38	0.0027	0.0073	0.0025	0.0117	0.0028	0.0023	0.0015	0.0066	3.9808
39	0.0004	0.0009	0.0005	0.0008	0.0006	0.0011	0.0003	0.0009	1.2436
40	0.0030	0.0007	0.0003	0.0004	0.0009	0.0010	0.0005	0.0057	1.3027
41	0.0003	0.0021	0.0007	0.0166	0.0005	0.0007	0.0007	0.0010	1.6537
42	0.0019	0.0067	0.0016	0.0136	0.0014	0.0017	0.0013	0.0046	2.2439
43	0.0001	0.0003	0.0034	0.0039	0.0003	0.0002	0.0006	0.0007	1.3496
44	0.0001	0.0001	0.0026	0.0001	0.0002	0.0001	0.0001	0.0001	1.0840
45	0.0004	0.0002	0.0005	0.0003	0.0002	0.0002	0.0006	0.0015	1.2358
46	0.0005	0.0002	0.0001	0.0002	0.0002	0.0002	0.0001	0.0011	1.1382
47	0.0001	0.0007	0.0010	0.0031	0.0002	0.0003	0.0003	0.0006	1.5453
48	0.0001	0.0003	0.0001	0.0002	0.0002	0.0002	0.0001	0.0003	1.1654
49	0.0004	0.0004	0.0007	0.0018	0.0003	0.0003	0.0003	0.0011	1.7064
50	0.0001	0.0005	0.0004	0.0130	0.0002	0.0002	0.0003	0.0006	1.4588
51	0.0000	0.0001	0.0023	0.0001	0.0002	0.0001	0.0001	0.0001	1.2170
52	0.0007	0.0005	0.0032	0.0008	0.0004	0.0003	0.0003	0.0014	1.1430

MATRIX : MRIO INVERSE

COLUMN / ROW	71	72	73	74	75	76	77	78	79
53	0.0006	0.0036	0.0043	0.0028	0.0007	0.0006	0.0005	0.0020	1.6974
54	0.0005	0.0101	0.0002	0.0001	0.0004	0.0003	0.0003	0.0010	1.0584
55	0.0009	0.0012	0.0003	0.0022	0.0004	0.0005	0.0004	0.0051	1.2208
56	0.0002	0.0004	0.0005	0.0006	0.0005	0.0004	0.0002	0.0004	1.2047
57	0.0001	0.0287	0.0005	0.0005	0.0004	0.0006	0.0003	0.0002	1.4543
58	0.0002	0.0007	0.0012	0.0200	0.0004	0.0004	0.0006	0.0008	1.2232
59	0.0004	0.0020	0.0011	0.1173	0.0009	0.0012	0.0034	0.0022	1.7647
60	0.0000	0.0002	0.0002	0.0002	0.0002	0.0002	0.0008	0.0002	1.3325
61	0.0001	0.0008	0.0006	0.0002	0.0002	0.0002	0.0010	0.0011	1.1466
62	0.0004	0.0007	0.0004	0.0009	0.0003	0.0079	0.0002	0.0010	1.2318
63	0.0002	0.0096	0.0055	0.0004	0.0194	0.0028	0.0004	0.0006	1.1466
64	0.0007	0.0244	0.0041	0.0008	0.0072	0.0029	0.0007	0.0018	1.2970
65	0.0074	0.0241	0.0206	0.0235	0.0249	0.0201	0.1295	0.0296	4.4877
66	0.0030	0.0118	0.0126	0.0104	0.0118	0.0148	0.0039	0.0080	1.7246
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0005	0.0000	0.0000	1.0062
68	0.0048	0.0253	0.0195	0.0178	0.0221	0.0401	0.0174	0.1266	3.3540
69	0.0143	0.0448	0.0262	0.1338	0.0339	0.0299	0.0164	0.0313	5.1338
70	0.0266	0.0241	0.0104	0.0258	0.0271	0.0129	0.0083	0.0244	2.5411
71	1.0392	0.0713	0.0468	0.0442	0.1309	0.0945	0.0326	0.0217	3.9096
72	0.0005	1.0294	0.0039	0.0026	0.0062	0.0076	0.0024	0.0014	1.2687
73	0.0187	0.0439	1.0468	0.0278	0.0680	0.0332	0.0260	0.0487	4.1614
74	0.0015	0.0101	0.0061	1.0067	0.0047	0.0061	0.0054	0.0045	1.3651
75	0.0001	0.0007	0.0007	0.0004	1.2393	0.0019	0.0003	0.0002	1.5994
76	0.0007	0.0036	0.0020	0.0013	0.0039	1.0101	0.0006	0.0019	1.1526
77	0.0045	0.0051	0.0205	0.0028	0.0046	0.0095	1.0016	0.0032	1.3278
78	0.0001	0.0008	0.0005	0.0007	0.0005	0.0009	0.0006	1.0007	1.0417
79	1.2674	1.5858	1.3355	1.6769	1.7358	1.4667	1.3470	1.6866	142.8746

MATRIX : RAS INVERSE

COLUMN	1	2	3	4	5	6	7	8	9	10
ROW										
1	1.3212	0.1046	0.0288	0.2300	0.0010	0.0016	0.0014	0.0012	0.0016	0.0012
2	0.4360	1.0662	0.0157	0.0815	0.0009	0.0014	0.0012	0.0011	0.0015	0.0011
3	0.0014	0.0007	1.0239	0.0015	0.0004	0.0014	0.0013	0.0004	0.0003	0.0004
4	0.0414	0.0461	0.0554	1.0076	0.0001	0.0002	0.0002	0.0002	0.0002	0.0001
5	0.0008	0.0010	0.0012	0.0015	1.0422	0.0028	0.0025	0.0006	0.0023	0.0025
6	0.0006	0.0009	0.0008	0.0015	0.0041	1.2177	0.0009	0.0005	0.0011	0.0012
7	0.0018	0.0016	0.0011	0.0019	0.0063	0.0044	1.1870	0.0010	0.0043	0.0049
8	0.0169	0.0234	0.0153	0.0080	0.0098	0.0095	0.0111	1.0320	0.0165	0.0138
9	0.0024	0.0045	0.0006	0.0012	0.0044	0.0009	0.0008	0.0014	1.0105	0.0089
10	0.0014	0.0030	0.0003	0.0006	0.0005	0.0013	0.0006	0.0003	0.0007	1.0477
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0279	0.0297	0.0063	0.0134	0.0159	0.0161	0.0160	0.0550	0.0156	0.0149
13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
14	0.2190	0.0225	0.0506	0.0806	0.0032	0.0049	0.0041	0.0037	0.0048	0.0038
15	0.0002	0.0002	0.0005	0.0005	0.0002	0.0003	0.0003	0.0002	0.0003	0.0002
16	0.0025	0.0028	0.0128	0.0106	0.0006	0.0013	0.0012	0.0004	0.0023	0.0013
17	0.0033	0.0037	0.0474	0.0372	0.0005	0.0008	0.0011	0.0005	0.0021	0.0005
18	0.0005	0.0003	0.0008	0.0010	0.0002	0.0004	0.0004	0.0002	0.0004	0.0003
19	0.0022	0.0022	0.0023	0.0014	0.0001	0.0002	0.0002	0.0001	0.0003	0.0001
20	0.0047	0.0053	0.0029	0.0127	0.0042	0.0137	0.0132	0.0035	0.0026	0.0028
21	0.0025	0.0046	0.0009	0.0127	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
22	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
23	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
24	0.0136	0.0077	0.0094	0.0493	0.0031	0.0049	0.0046	0.0030	0.0094	0.0079
25	0.0087	0.0056	0.0076	0.0789	0.0010	0.0017	0.0017	0.0008	0.0024	0.0014
26	0.0052	0.0030	0.0030	0.0033	0.0020	0.0024	0.0022	0.0018	0.0024	0.0021
27	0.0400	0.0778	0.0130	0.0217	0.0242	0.0632	0.0288	0.0149	0.0340	0.0383
28	0.0030	0.0029	0.0108	0.0098	0.0018	0.0029	0.0042	0.0012	0.0089	0.0018
29	0.0054	0.0010	0.0008	0.0017	0.0004	0.0005	0.0004	0.0003	0.0005	0.0007
30	0.0018	0.0018	0.0043	0.0019	0.0010	0.0012	0.0013	0.0030	0.0013	0.0011
31	0.0329	0.0469	0.0318	0.0148	0.0158	0.0118	0.0165	0.0109	0.0272	0.0168
32	0.0067	0.0071	0.0045	0.0056	0.0074	0.0107	0.0184	0.0031	0.0430	0.0058
33	0.0002	0.0001	0.0001	0.0007	0.0000	0.0001	0.0001	0.0000	0.0001	0.0001
34	0.0005	0.0002	0.0003	0.0027	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001
35	0.0033	0.0007	0.0019	0.0014	0.0003	0.0004	0.0007	0.0006	0.0007	0.0004
36	0.0022	0.0033	0.0016	0.0023	0.0040	0.0032	0.0033	0.0057	0.0041	0.0021
37	0.0099	0.0091	0.0195	0.0263	0.0295	0.0455	0.0434	0.0097	0.0403	0.0422
38	0.0043	0.0049	0.0090	0.0165	0.0059	0.0091	0.0090	0.0043	0.0113	0.0119
39	0.0062	0.0023	0.0163	0.0024	0.0005	0.0010	0.0006	0.0005	0.0008	0.0007
40	0.0009	0.0010	0.0009	0.0005	0.0011	0.0022	0.0013	0.0034	0.0020	0.0018
41	0.0027	0.0011	0.0019	0.0024	0.0011	0.0018	0.0024	0.0008	0.0027	0.0017
42	0.0089	0.0088	0.0195	0.1165	0.0034	0.0072	0.0098	0.0033	0.0068	0.0045
43	0.0007	0.0010	0.0007	0.0004	0.0077	0.0108	0.0193	0.0018	0.0230	0.0092
44	0.0042	0.0095	0.0002	0.0008	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
45	0.0004	0.0005	0.0002	0.0003	0.0185	0.0254	0.0405	0.0025	0.0273	0.0266
46	0.0003	0.0003	0.0001	0.0002	0.0004	0.0033	0.0005	0.0004	0.0096	0.0076
47	0.0005	0.0006	0.0009	0.0017	0.0023	0.0035	0.0053	0.0006	0.0032	0.0022
48	0.0007	0.0010	0.0005	0.0009	0.0003	0.0008	0.0005	0.0002	0.0005	0.0005
49	0.0010	0.0015	0.0015	0.0009	0.0024	0.0039	0.0056	0.0030	0.0177	0.0063
50	0.0008	0.0010	0.0007	0.0007	0.0012	0.0311	0.0076	0.0004	0.0069	0.0045
51	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
52	0.0004	0.0004	0.0002	0.0002	0.0003	0.0003	0.0003	0.0005	0.0003	0.0003

MATRIX : RAS INVERSE

COLUMN / ROW	1	2	3	4	5	6	7	8	9	10
53	0.0009	0.0011	0.0018	0.0012	0.0014	0.0024	0.0058	0.0082	0.0068	0.0098
54	0.0002	0.0002	0.0003	0.0002	0.0001	0.0002	0.0002	0.0003	0.0002	0.0001
55	0.0005	0.0006	0.0256	0.0003	0.0005	0.0009	0.0057	0.0007	0.0010	0.0020
56	0.0002	0.0002	0.0002	0.0003	0.0002	0.0004	0.0002	0.0006	0.0002	0.0002
57	0.0002	0.0002	0.0003	0.0003	0.0003	0.0003	0.0003	0.0017	0.0004	0.0004
58	0.0013	0.0016	0.0026	0.0005	0.0008	0.0010	0.0014	0.0004	0.0019	0.0009
59	0.0026	0.0024	0.0018	0.0012	0.0036	0.0039	0.0067	0.0014	0.0141	0.0036
60	0.0004	0.0002	0.0004	0.0008	0.0007	0.0003	0.0003	0.0002	0.0003	0.0005
61	0.0006	0.0005	0.0158	0.0005	0.0009	0.0020	0.0047	0.0003	0.0004	0.0011
62	0.0004	0.0003	0.0007	0.0003	0.0005	0.0008	0.0004	0.0008	0.0005	0.0003
63	0.0005	0.0005	0.0003	0.0004	0.0004	0.0004	0.0004	0.0003	0.0004	0.0003
64	0.0009	0.0009	0.0014	0.0016	0.0006	0.0016	0.0007	0.0007	0.0008	0.0006
65	0.0598	0.0323	0.0540	0.0570	0.1100	0.0427	0.0384	0.0364	0.0375	0.0799
66	0.0084	0.0071	0.0030	0.0051	0.0042	0.0051	0.0049	0.0032	0.0041	0.0078
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
68	0.0212	0.0213	0.0082	0.0144	0.0310	0.0507	0.0449	0.0172	0.0511	0.0767
69	0.0801	0.0543	0.0594	0.0693	0.0283	0.0378	0.0415	0.0247	0.0469	0.0366
70	0.0248	0.0242	0.0093	0.0174	0.0141	0.0314	0.0224	0.0184	0.0261	0.0180
71	0.0672	0.1001	0.0160	0.0586	0.0933	0.0466	0.0457	0.2034	0.0388	0.0305
72	0.0020	0.0013	0.0027	0.0034	0.0011	0.0017	0.0016	0.0013	0.0018	0.0013
73	0.0427	0.0493	0.0140	0.0231	0.0353	0.0256	0.0261	0.0198	0.0270	0.0224
74	0.0093	0.0086	0.0067	0.0044	0.0035	0.0037	0.0053	0.0051	0.0121	0.0040
75	0.0005	0.0004	0.0008	0.0009	0.0003	0.0005	0.0004	0.0004	0.0005	0.0004
76	0.0100	0.0019	0.0008	0.0024	0.0012	0.0017	0.0016	0.0010	0.0010	0.0035
77	0.0030	0.0029	0.0015	0.0024	0.0029	0.0030	0.0027	0.0023	0.0026	0.0041
78	0.0004	0.0003	0.0004	0.0003	0.0007	0.0009	0.0005	0.0004	0.0014	0.0016
79	2.5902	1.8372	1.6567	2.1368	1.5668	1.7937	1.7348	1.5286	1.6323	1.6112

MATRIX : RAS INVERSE

COLUMN / ROW	11	12	13	14	15	16	17	18	19	20
1	0.0034	0.0029	0.0024	0.3567	0.0233	0.0319	0.0881	0.0135	0.0231	0.0051
2	0.0081	0.0023	0.0022	0.2256	0.2240	0.1820	0.0713	0.0640	0.0690	0.0033
3	0.0077	0.0052	0.0008	0.0061	0.0005	0.0008	0.0010	0.0085	0.0012	0.1304
4	0.0010	0.0006	0.0002	0.0160	0.0098	0.0083	0.0047	0.0035	0.0035	0.0072
5	0.0052	0.0026	0.0032	0.0014	0.0005	0.0012	0.0011	0.0007	0.0008	0.0012
6	0.0046	0.0027	0.0069	0.0006	0.0004	0.0013	0.0012	0.0008	0.0009	0.0008
7	0.0045	0.0024	0.0027	0.0029	0.0014	0.0049	0.0041	0.0026	0.0031	0.0019
8	0.0158	0.0199	0.0057	0.0126	0.0067	0.0113	0.0095	0.0068	0.0079	0.0096
9	0.0169	0.0164	0.0008	0.0019	0.0012	0.0016	0.0012	0.0008	0.0010	0.0012
10	0.0006	0.0006	0.0004	0.0011	0.0008	0.0028	0.0023	0.0013	0.0015	0.0003
11	1.0000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0111	1.0093	0.0079	0.0189	0.0101	0.0165	0.0151	0.0113	0.0136	0.0125
13	0.0001	0.0000	1.0295	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
14	0.0079	0.0091	0.0074	1.2797	0.0093	0.0177	0.0308	0.0118	0.0140	0.0110
15	0.0004	0.0004	0.0005	0.0003	1.3115	0.0003	0.0003	0.0004	0.0004	0.0003
16	0.0041	0.0019	0.0027	0.0032	0.0010	1.5168	0.2731	0.5199	0.5242	0.0032
17	0.0040	0.0014	0.0016	0.0023	0.0010	0.0520	1.0896	0.0252	0.1582	0.0065
18	0.0015	0.0014	0.0017	0.0014	0.0002	0.0009	0.0113	1.2198	0.0098	0.0028
19	0.0006	0.0002	0.0002	0.0026	0.0005	0.0017	0.0251	0.0208	1.1234	0.0004
20	0.0839	0.0560	0.0082	0.0074	0.0043	0.0052	0.0067	0.0043	0.0099	1.4460
21	0.0004	0.0003	0.0014	0.0027	0.0019	0.0010	0.0005	0.0004	0.0005	0.0003
22	0.0055	0.0000	0.0011	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000
23	0.0029	0.0002	0.0005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
24	0.0146	0.0124	0.0089	0.0429	0.0254	0.0301	0.0465	0.0220	0.0286	0.0087
25	0.0047	0.0038	0.0044	0.0253	0.0191	0.0138	0.0173	0.0157	0.0217	0.0050
26	0.0036	0.0029	0.0047	0.0156	0.0163	0.0036	0.0037	0.0037	0.0040	0.0029
27	0.0216	0.0264	0.0164	0.0310	0.0263	0.1282	0.1096	0.0593	0.0696	0.0257
28	0.0066	0.0081	0.0077	0.0055	0.0157	0.1435	0.2031	0.0772	0.0951	0.0058
29	0.0013	0.0010	0.0009	0.0048	0.0018	0.0056	0.0050	0.0033	0.0030	0.0007
30	0.0077	0.0454	0.0011	0.0021	0.0008	0.0020	0.0014	0.0013	0.0013	0.0086
31	0.0299	0.0396	0.0089	0.0228	0.0125	0.0178	0.0150	0.0105	0.0120	0.0169
32	0.0140	0.0120	0.0275	0.0092	0.0025	0.0077	0.0205	0.0073	0.0524	0.0037
33	0.0002	0.0001	0.0002	0.0002	0.0001	0.0003	0.0003	0.0036	0.0002	0.0003
34	0.0002	0.0001	0.0002	0.0003	0.0001	0.0001	0.0002	0.0002	0.0002	0.0001
35	0.0038	0.0064	0.0020	0.0149	0.0003	0.0059	0.0019	0.0024	0.0025	0.0026
36	0.1037	0.0258	0.0023	0.0020	0.0011	0.0016	0.0013	0.0010	0.0012	0.0089
37	0.0905	0.0451	0.0565	0.0221	0.0055	0.0079	0.0075	0.0058	0.0073	0.0193
38	0.0558	0.0308	0.0845	0.0053	0.0029	0.0051	0.0053	0.0046	0.0058	0.0082
39	0.0013	0.0037	0.0005	0.0287	0.0024	0.0026	0.0027	0.0015	0.0016	0.0031
40	0.0969	0.0300	0.0004	0.0007	0.0004	0.0008	0.0007	0.0005	0.0006	0.0006
41	0.0063	0.0037	0.0074	0.0050	0.0005	0.0007	0.0009	0.0008	0.0007	0.0021
42	0.0272	0.0202	0.0151	0.0089	0.0105	0.0045	0.0044	0.0042	0.0046	0.0281
43	0.0018	0.0010	0.0005	0.0007	0.0006	0.0007	0.0006	0.0004	0.0005	0.0005
44	0.0004	0.0002	0.0002	0.0023	0.0022	0.0018	0.0008	0.0007	0.0008	0.0001
45	0.0053	0.0047	0.0004	0.0004	0.0002	0.0004	0.0004	0.0003	0.0003	0.0003
46	0.0048	0.0056	0.0004	0.0004	0.0002	0.0006	0.0005	0.0005	0.0005	0.0008
47	0.0027	0.0016	0.0099	0.0006	0.0004	0.0007	0.0005	0.0004	0.0005	0.0008
48	0.0008	0.0006	0.0004	0.0013	0.0005	0.0114	0.0070	0.0047	0.0049	0.0053
49	0.0066	0.0045	0.0056	0.0010	0.0006	0.0015	0.0012	0.0008	0.0008	0.0011
50	0.0021	0.0013	0.0128	0.0008	0.0003	0.0005	0.0004	0.0003	0.0004	0.0006
51	0.0003	0.0001	0.0004	0.0002	0.0003	0.0002	0.0002	0.0002	0.0002	0.0001
52	0.0076	0.0067	0.0003	0.0004	0.0004	0.0003	0.0003	0.0003	0.0003	0.0002

MATRIX : RAS INVERSE

COLUMN / ROW	11	12	13	14	15	16	17	18	19	20
53	0.0103	0.0062	0.0090	0.0011	0.0008	0.0013	0.0011	0.0009	0.0009	0.0011
54	0.0031	0.0053	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
55	0.0189	0.0104	0.0012	0.0006	0.0002	0.0004	0.0004	0.0005	0.0003	0.0035
56	0.0017	0.0014	0.0621	0.0003	0.0002	0.0003	0.0003	0.0003	0.0003	0.0002
57	0.0009	0.0007	0.0328	0.0004	0.0002	0.0003	0.0003	0.0003	0.0003	0.0003
58	0.0020	0.0015	0.0051	0.0010	0.0005	0.0006	0.0005	0.0004	0.0005	0.0009
59	0.0027	0.0028	0.0011	0.0023	0.0008	0.0013	0.0012	0.0010	0.0012	0.0020
60	0.0005	0.0004	0.1590	0.0005	0.0002	0.0004	0.0004	0.0003	0.0003	0.0005
61	0.0008	0.0005	0.0003	0.0008	0.0003	0.0005	0.0005	0.0005	0.0004	0.0025
62	0.0048	0.0047	0.0099	0.0004	0.0002	0.0007	0.0005	0.0010	0.0008	0.0008
63	0.0009	0.0005	0.0051	0.0009	0.0009	0.0007	0.0007	0.0009	0.0008	0.0006
64	0.0030	0.0053	0.0016	0.0013	0.0009	0.0018	0.0148	0.0270	0.0050	0.0011
65	0.0716	0.0525	0.0296	0.0765	0.0224	0.0541	0.0597	0.0371	0.0468	0.0715
66	0.0098	0.0090	0.0170	0.0095	0.0043	0.0085	0.0092	0.0105	0.0116	0.0076
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
68	0.0256	0.0201	0.0201	0.0258	0.0107	0.0370	0.0304	0.0232	0.0285	0.0224
69	0.1162	0.1106	0.0442	0.0825	0.0303	0.0844	0.1066	0.0833	0.1147	0.0569
70	0.0204	0.0197	0.0146	0.0223	0.0111	0.0188	0.0182	0.0179	0.0220	0.0206
71	0.0302	0.0277	0.0208	0.0469	0.0313	0.0392	0.0339	0.0372	0.0388	0.0250
72	0.0030	0.0028	0.0056	0.0052	0.0038	0.0027	0.0032	0.0027	0.0043	0.0018
73	0.0726	0.0352	0.0441	0.0655	0.0735	0.0428	0.0429	0.0408	0.0429	0.0325
74	0.0078	0.0082	0.0042	0.0085	0.0031	0.0044	0.0043	0.0036	0.0044	0.0071
75	0.0008	0.0008	0.0008	0.0006	0.0005	0.0006	0.0006	0.0007	0.0008	0.0005
76	0.0021	0.0022	0.0028	0.0040	0.0009	0.0015	0.0019	0.0016	0.0019	0.0013
77	0.0040	0.0029	0.0047	0.0042	0.0049	0.0038	0.0041	0.0058	0.0055	0.0028
78	0.0009	0.0008	0.0004	0.0008	0.0002	0.0006	0.0006	0.0004	0.0006	0.0006
79	2.1268	1.8115	1.8645	2.5609	1.9605	2.5648	2.4325	2.4478	2.6215	2.0701

MATRIX '. RAS INVERSE

COLUMN	21	22	23	24	25	26	27	28	29	30
ROW										
1	0.0034	0.0076	0.0046	0.0069	0.0040	0.0047	0.0070	0.0049	0.0153	0.0200
2	0.0025	0.0149	0.0040	0.0059	0.0035	0.0039	0.0065	0.0041	0.0115	0.0137
3	0.0449	0.0191	0.0113	0.0104	0.0050	0.0026	0.0034	0.0018	0.0012	0.0014
4	0.0026	0.0019	0.0010	0.0010	0.0006	0.0005	0.0007	0.0005	0.0009	0.0011
5	0.0068	0.0029	0.0080	0.0010	0.0008	0.0006	0.0092	0.0032	0.0019	0.0043
6	0.0009	0.0024	0.0027	0.0010	0.0011	0.0007	0.0107	0.0037	0.0014	0.0040
7	0.0043	0.0034	0.0056	0.0111	0.0059	0.0033	0.0102	0.0098	0.0031	0.0048
8	0.0088	0.0077	0.0077	0.0127	0.0121	0.0071	0.0168	0.0111	0.0085	0.0300
9	0.0011	0.0012	0.0024	0.0064	0.0033	0.0017	0.0041	0.0019	0.0019	0.0040
10	0.0004	0.0009	0.0007	0.0027	0.0018	0.0013	0.0252	0.0085	0.0029	0.0059
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0135	0.0124	0.0123	0.0140	0.0137	0.0150	0.0170	0.0151	0.0128	0.0156
13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
14	0.0088	0.0111	0.0089	0.0221	0.0129	0.0149	0.0233	0.0164	0.0514	0.0705
15	0.0005	0.0005	0.0004	0.0003	0.0003	0.0007	0.0004	0.0004	0.0007	0.0008
16	0.0027	0.0969	0.0107	0.0128	0.0066	0.0041	0.0021	0.0021	0.0031	0.0017
17	0.0025	0.0361	0.0228	0.0037	0.0019	0.0029	0.0008	0.0006	0.0021	0.0006
18	0.0040	0.0035	0.0028	0.0017	0.0021	0.0006	0.0011	0.0012	0.0011	0.0012
19	0.0003	0.0012	0.0007	0.0003	0.0002	0.0003	0.0016	0.0006	0.0004	0.0006
20	0.4975	0.2104	0.1243	0.1126	0.0530	0.0270	0.0095	0.0101	0.0064	0.0052
21	1.0363	0.0005	0.0006	0.0002	0.0002	0.0001	0.0005	0.0006	0.0006	0.0007
22	0.0000	1.0189	0.0026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
23	0.0000	0.0000	1.0246	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
24	0.0089	0.0199	0.0202	1.2721	0.5803	0.2615	0.0286	0.0707	0.0410	0.0244
25	0.0066	0.0201	0.0233	0.0369	1.0467	0.0133	0.0105	0.0136	0.0337	0.0152
26	0.0033	0.0040	0.0042	0.0069	0.0069	1.1524	0.0042	0.0039	0.0131	0.0082
27	0.0146	0.0392	0.0290	0.0725	0.0604	0.0530	1.2705	0.4232	0.1261	0.2955
28	0.0029	0.0322	0.0184	0.0232	0.0189	0.0095	0.0063	1.0224	0.0095	0.0959
29	0.0008	0.0015	0.0011	0.0021	0.0014	0.0013	0.0017	0.0044	1.0657	0.0060
30	0.0036	0.0262	0.0227	0.0017	0.0012	0.0028	0.0030	0.0016	0.0026	1.0035
31	0.0143	0.0122	0.0119	0.0197	0.0205	0.0112	0.0189	0.0148	0.0136	0.0582
32	0.0031	0.0687	0.0577	0.0176	0.0100	0.0101	0.0032	0.0038	0.0392	0.0034
33	0.0005	0.0016	0.0018	0.0004	0.0003	0.0002	0.0005	0.0003	0.0002	0.0003
34	0.0002	0.0002	0.0002	0.0001	0.0001	0.0002	0.0001	0.0001	0.0002	0.0002
35	0.0012	0.0088	0.0257	0.0008	0.0006	0.0007	0.0015	0.0009	0.0231	0.0014
36	0.0039	0.0032	0.0126	0.0033	0.0020	0.0014	0.0041	0.0019	0.0034	0.0044
37	0.1275	0.0510	0.1483	0.0100	0.0073	0.0056	0.0279	0.0128	0.0214	0.0472
38	0.0093	0.0268	0.0307	0.0059	0.0089	0.0047	0.0262	0.0108	0.0073	0.0253
39	0.0013	0.0028	0.0023	0.0017	0.0013	0.0012	0.0145	0.0079	0.0256	0.0687
40	0.0007	0.0005	0.0005	0.0006	0.0006	0.0006	0.0009	0.0006	0.0005	0.0007
41	0.0037	0.0039	0.0140	0.0009	0.0007	0.0006	0.0012	0.0007	0.0053	0.0016
42	0.0188	0.0766	0.0478	0.0197	0.0132	0.0066	0.0112	0.0057	0.0112	0.0054
43	0.0006	0.0005	0.0006	0.0008	0.0006	0.0005	0.0011	0.0008	0.0011	0.0008
44	0.0001	0.0003	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0008	0.0003
45	0.0004	0.0004	0.0006	0.0008	0.0005	0.0003	0.0016	0.0008	0.0005	0.0008
46	0.0010	0.0006	0.0005	0.0009	0.0006	0.0004	0.0011	0.0007	0.0004	0.0006
47	0.0009	0.0015	0.0015	0.0007	0.0006	0.0004	0.0011	0.0006	0.0008	0.0007
48	0.0067	0.0021	0.0012	0.0045	0.0042	0.0039	0.0143	0.0050	0.0017	0.0035
49	0.0016	0.0011	0.0019	0.0036	0.0020	0.0012	0.0025	0.0014	0.0009	0.0013
50	0.0015	0.0010	0.0039	0.0005	0.0005	0.0004	0.0011	0.0006	0.0007	0.0010
51	0.0001	0.0002	0.0002	0.0001	0.0002	0.0002	0.0002	0.0002	0.0007	0.0002
52	0.0003	0.0003	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0009	0.0004

MATRIX : RAS INVERSE

COLUMN / ROW	21	22	23	24	25	26	27	28	29	30
53	0.0018	0.0015	0.0021	0.0011	0.0010	0.0010	0.0031	0.0015	0.0018	0.0017
54	0.0002	0.0002	0.0002	0.0002	0.0002	0.0003	0.0002	0.0002	0.0003	0.0003
55	0.0015	0.0009	0.0017	0.0006	0.0004	0.0004	0.0005	0.0004	0.0008	0.0004
56	0.0003	0.0003	0.0003	0.0003	0.0003	0.0005	0.0003	0.0003	0.0004	0.0004
57	0.0004	0.0003	0.0003	0.0003	0.0003	0.0004	0.0003	0.0003	0.0005	0.0005
58	0.0008	0.0005	0.0006	0.0005	0.0005	0.0004	0.0005	0.0004	0.0006	0.0005
59	0.0019	0.0014	0.0014	0.0013	0.0013	0.0013	0.0013	0.0011	0.0012	0.0013
60	0.0007	0.0004	0.0004	0.0005	0.0005	0.0003	0.0004	0.0004	0.0003	0.0005
61	0.0015	0.0008	0.0006	0.0008	0.0007	0.0004	0.0006	0.0005	0.0005	0.0006
62	0.0011	0.0008	0.0008	0.0005	0.0006	0.0006	0.0004	0.0004	0.0010	0.0005
63	0.0008	0.0008	0.0008	0.0006	0.0007	0.0104	0.0007	0.0007	0.0019	0.0009
64	0.0015	0.0024	0.0020	0.0011	0.0011	0.0031	0.0011	0.0011	0.0021	0.0015
65	0.1012	0.0597	0.0559	0.0750	0.0756	0.0468	0.0654	0.0575	0.0501	0.0675
66	0.0096	0.0109	0.0124	0.0081	0.0100	0.0177	0.0095	0.0097	0.0119	0.0119
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
68	0.0280	0.0248	0.0281	0.0454	0.0328	0.0230	0.0704	0.0448	0.0251	0.0338
69	0.0641	0.0797	0.0703	0.0622	0.0565	0.0493	0.0600	0.0615	0.0656	0.0865
70	0.0199	0.0229	0.0271	0.0173	0.0155	0.0191	0.0180	0.0176	0.0186	0.0210
71	0.0299	0.0432	0.0353	0.0249	0.0291	0.0784	0.0268	0.0264	0.0363	0.0360
72	0.0033	0.0033	0.0030	0.0038	0.0046	0.0062	0.0034	0.0034	0.0084	0.0084
73	0.0326	0.0467	0.0418	0.0380	0.0417	0.0540	0.0473	0.0551	0.1894	0.0598
74	0.0066	0.0049	0.0048	0.0041	0.0043	0.0049	0.0040	0.0036	0.0044	0.0046
75	0.0008	0.0008	0.0007	0.0006	0.0006	0.0011	0.0007	0.0007	0.0011	0.0013
76	0.0015	0.0017	0.0019	0.0013	0.0015	0.0030	0.0015	0.0015	0.0019	0.0021
77	0.0033	0.0043	0.0045	0.0033	0.0035	0.0146	0.0037	0.0035	0.0084	0.0048
78	0.0006	0.0005	0.0005	0.0008	0.0006	0.0007	0.0010	0.0008	0.0006	0.0006
79	2.1940	2.1745	2.0393	2.0278	2.2038	1.9745	1.9297	2.0005	2.0117	2.2093

MATRIX : RAS INVERSE

COLUMN	31	32	33	34	35	36	37	38	39	40
ROW										
1	0.0020	0.0068	0.2137	0.0454	0.0022	0.0028	0.0015	0.0020	0.0024	0.0026
2	0.0016	0.0089	0.1053	0.0302	0.0020	0.0036	0.0013	0.0018	0.0020	0.0022
3	0.0006	0.0012	0.0025	0.0026	0.0034	0.0010	0.0006	0.0008	0.0007	0.0008
4	0.0002	0.0007	0.0084	0.0023	0.0004	0.0003	0.0002	0.0003	0.0003	0.0003
5	0.0009	0.0016	0.0011	0.0008	0.0010	0.0040	0.0668	0.0030	0.0285	0.0179
6	0.0010	0.0016	0.0008	0.0008	0.0016	0.0012	0.0043	0.1253	0.0040	0.0119
7	0.0025	0.0048	0.0054	0.0027	0.0046	0.0151	0.0316	0.0046	0.0144	0.0097
8	0.5059	0.0077	0.0112	0.0062	0.0102	0.0144	0.0122	0.0124	0.0097	0.0091
9	0.0049	0.0022	0.0013	0.0008	0.0173	0.0938	0.0049	0.0031	0.0025	0.0023
10	0.0010	0.0029	0.0021	0.0010	0.0021	0.0021	0.0014	0.0008	0.0010	0.0007
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0517	0.0121	0.0154	0.0103	0.0138	0.0162	0.0186	0.0142	0.0142	0.0134
13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
14	0.0065	0.0104	0.4245	0.0854	0.0067	0.0076	0.0046	0.0058	0.0079	0.0081
15	0.0003	0.0005	0.0003	0.0004	0.0004	0.0004	0.0003	0.0003	0.0004	0.0005
16	0.0007	0.0437	0.0017	0.0675	0.0028	0.0062	0.0013	0.0036	0.0016	0.0021
17	0.0004	0.0436	0.0013	0.0425	0.0016	0.0036	0.0006	0.0021	0.0007	0.0012
18	0.0005	0.0024	0.0006	0.0078	0.0022	0.0019	0.0017	0.0013	0.0018	0.0022
19	0.0001	0.0013	0.0011	0.0112	0.0003	0.0029	0.0001	0.0002	0.0002	0.0002
20	0.0048	0.0093	0.0061	0.0226	0.0360	0.0098	0.0053	0.0071	0.0067	0.0077
21	0.0001	0.0006	0.0017	0.0013	0.0045	0.0004	0.0003	0.0003	0.0003	0.0014
22	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
23	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
24	0.0137	0.0317	0.0222	0.0298	0.0361	0.0343	0.0057	0.0094	0.0275	0.0120
25	0.0048	0.0230	0.0148	0.0249	0.0545	0.0079	0.0026	0.0032	0.0219	0.0088
26	0.0033	0.0036	0.0078	0.0049	0.0033	0.0034	0.0029	0.0026	0.0533	0.0037
27	0.0455	0.1410	0.0734	0.0403	0.0742	0.0387	0.0351	0.0380	0.0340	0.0266
28	0.0016	0.2012	0.0038	0.0357	0.0075	0.0137	0.0020	0.0172	0.0068	0.0046
29	0.0034	0.0017	0.0550	0.0132	0.0008	0.0039	0.0006	0.0006	0.0016	0.0015
30	0.0030	0.0022	0.0014	0.0012	0.0031	0.0012	0.0013	0.0011	0.0300	0.0128
31	1.0934	0.0105	0.0186	0.0096	0.0109	0.0208	0.0175	0.0170	0.0146	0.0139
32	0.0031	1.0542	0.0072	0.1022	0.0274	0.0140	0.0041	0.0047	0.0064	0.0047
33	0.0002	0.0002	1.2311	0.2266	0.0002	0.0006	0.0004	0.0003	0.0003	0.0003
34	0.0001	0.0001	0.0002	1.0309	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002
35	0.0007	0.0035	0.0063	0.0024	1.0718	0.0006	0.0004	0.0005	0.0004	0.0103
36	0.0056	0.0022	0.0027	0.0014	0.0306	1.1317	0.0039	0.0059	0.0023	0.0051
37	0.0119	0.0149	0.0115	0.0106	0.0100	0.0302	1.2745	0.0185	0.5403	0.3363
38	0.0082	0.0086	0.0043	0.0059	0.0128	0.0106	0.0465	1.5615	0.0456	0.1455
39	0.0078	0.0027	0.0115	0.0029	0.0013	0.0009	0.0007	0.0008	1.0029	0.0014
40	0.0025	0.0005	0.0006	0.0004	0.0010	0.0021	0.0008	0.0008	0.0006	1.0236
41	0.0008	0.0019	0.0023	0.0012	0.0010	0.0015	0.0087	0.0043	0.0118	0.0196
42	0.0035	0.0091	0.0066	0.0133	0.0037	0.0160	0.0228	0.0090	0.0128	0.0476
43	0.0013	0.0005	0.0006	0.0005	0.0008	0.0032	0.0015	0.0016	0.0009	0.0009
44	0.0002	0.0003	0.0012	0.0005	0.0002	0.0002	0.0001	0.0001	0.0002	0.0002
45	0.0016	0.0005	0.0004	0.0003	0.0010	0.0092	0.0026	0.0030	0.0013	0.0011
46	0.0006	0.0006	0.0005	0.0005	0.0007	0.0028	0.0009	0.0010	0.0006	0.0007
47	0.0006	0.0012	0.0005	0.0005	0.0017	0.0025	0.0025	0.0098	0.0028	0.0071
48	0.0006	0.0029	0.0012	0.0014	0.0012	0.0007	0.0017	0.0012	0.0012	0.0008
49	0.0020	0.0009	0.0010	0.0006	0.0011	0.0040	0.0081	0.0061	0.0039	0.0094
50	0.0005	0.0013	0.0005	0.0005	0.0006	0.0014	0.0111	0.0163	0.0051	0.0045
51	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	0.0001	0.0002	0.0002
52	0.0005	0.0003	0.0003	0.0003	0.0003	0.0003	0.0011	0.0002	0.0006	0.0080

MATRIX ': RAS INVERSE

COLUMN	31	32	33	34	35	36	37	38	39	40
ROW										
53	0.0046	0.0010	0.0009	0.0009	0.0009	0.0019	0.0092	0.0042	0.0044	0.0178
54	0.0003	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
55	0.0007	0.0003	0.0004	0.0003	0.0005	0.0023	0.0006	0.0007	0.0004	0.0006
56	0.0004	0.0003	0.0003	0.0003	0.0002	0.0003	0.0003	0.0003	0.0003	0.0004
57	0.0010	0.0003	0.0003	0.0003	0.0003	0.0003	0.0005	0.0003	0.0004	0.0009
58	0.0005	0.0004	0.0006	0.0004	0.0004	0.0009	0.0006	0.0005	0.0005	0.0006
59	0.0015	0.0015	0.0015	0.0011	0.0012	0.0031	0.0015	0.0013	0.0013	0.0013
60	0.0005	0.0003	0.0004	0.0003	0.0003	0.0006	0.0006	0.0004	0.0005	0.0004
61	0.0006	0.0004	0.0006	0.0004	0.0005	0.0008	0.0008	0.0007	0.0007	0.0005
62	0.0006	0.0005	0.0006	0.0009	0.0006	0.0006	0.0016	0.0006	0.0010	0.0080
63	0.0006	0.0007	0.0008	0.0010	0.0007	0.0007	0.0006	0.0005	0.0011	0.0010
64	0.0009	0.0030	0.0012	0.0201	0.0030	0.0030	0.0026	0.0019	0.0018	0.0019
65	0.0801	0.0492	0.0593	0.0415	0.0495	0.0922	0.0876	0.0584	0.0755	0.0606
66	0.0056	0.0088	0.0090	0.0099	0.0077	0.0100	0.0095	0.0088	0.0087	0.0130
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
68	0.0384	0.0328	0.0312	0.0209	0.0653	0.0609	0.0519	0.0582	0.0373	0.0345
69	0.0427	0.0622	0.0877	0.0719	0.0589	0.0507	0.0561	0.0641	0.0663	0.0673
70	0.0270	0.0157	0.0226	0.0189	0.0173	0.0212	0.0218	0.0190	0.0230	0.0205
71	0.1296	0.0257	0.0429	0.0302	0.0240	0.0261	0.0234	0.0240	0.0290	0.0324
72	0.0020	0.0041	0.0032	0.0032	0.0031	0.0029	0.0022	0.0021	0.0031	0.0064
73	0.0445	0.0497	0.0523	0.0528	0.0416	0.0416	0.0335	0.0314	0.0457	0.0411
74	0.0049	0.0034	0.0056	0.0038	0.0036	0.0072	0.0039	0.0034	0.0039	0.0042
75	0.0004	0.0008	0.0006	0.0007	0.0006	0.0007	0.0005	0.0005	0.0007	0.0008
76	0.0012	0.0015	0.0029	0.0019	0.0012	0.0016	0.0013	0.0012	0.0014	0.0018
77	0.0036	0.0037	0.0042	0.0065	0.0036	0.0035	0.0030	0.0030	0.0037	0.0038
78	0.0005	0.0006	0.0009	0.0005	0.0005	0.0007	0.0007	0.0006	0.0006	0.0005
79	2.1995	1.9508	2.6220	2.1929	1.7572	1.8780	1.9325	2.2101	2.2404	2.1265

MATRIX *: RAS INVERSE

COLUMN / ROW	41	42	43	44	45	46	47	48	49	50
1	0.0020	0.0031	0.0021	0.0034	0.0022	0.0025	0.0022	0.0026	0.0023	0.0024
2	0.0018	0.0026	0.0019	0.0026	0.0020	0.0024	0.0019	0.0022	0.0020	0.0023
3	0.0016	0.0013	0.0005	0.0008	0.0005	0.0005	0.0005	0.0010	0.0007	0.0005
4	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0002	0.0003	0.0003	0.0002
5	0.0155	0.0106	0.0101	0.0128	0.0142	0.0109	0.0078	0.0087	0.0102	0.0079
6	0.0093	0.0109	0.0084	0.0038	0.0039	0.0048	0.0043	0.0052	0.0068	0.0071
7	0.0087	0.0067	0.0071	0.0079	0.0083	0.0065	0.0049	0.0052	0.0062	0.0049
8	0.0088	0.0080	0.0086	0.0080	0.0078	0.0081	0.0074	0.0092	0.0090	0.0067
9	0.0020	0.0026	0.0022	0.0019	0.0019	0.0015	0.0022	0.0015	0.0021	0.0022
10	0.0007	0.0009	0.0005	0.0006	0.0005	0.0005	0.0004	0.0005	0.0005	0.0004
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0116	0.0112	0.0103	0.0108	0.0110	0.0113	0.0101	0.0120	0.0105	0.0121
13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
14	0.0063	0.0080	0.0066	0.0093	0.0068	0.0073	0.0070	0.0075	0.0071	0.0076
15	0.0004	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
16	0.0022	0.0041	0.0019	0.0026	0.0024	0.0050	0.0017	0.0032	0.0019	0.0034
17	0.0012	0.0077	0.0008	0.0016	0.0016	0.0022	0.0007	0.0015	0.0009	0.0008
18	0.0023	0.0023	0.0020	0.0021	0.0020	0.0020	0.0023	0.0021	0.0021	0.0027
19	0.0002	0.0004	0.0002	0.0003	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
20	0.0162	0.0130	0.0051	0.0080	0.0050	0.0044	0.0044	0.0099	0.0064	0.0045
21	0.0008	0.0008	0.0007	0.0009	0.0007	0.0002	0.0003	0.0005	0.0006	0.0009
22	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
23	0.0000	0.0000	0.0000	0.0009	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
24	0.0183	0.0162	0.0094	0.0099	0.0081	0.0091	0.0077	0.0079	0.0095	0.0088
25	0.0149	0.0152	0.0076	0.0074	0.0050	0.0052	0.0047	0.0041	0.0058	0.0071
26	0.0032	0.0036	0.0035	0.0041	0.0037	0.0041	0.0034	0.0038	0.0037	0.0034
27	0.0287	0.0393	0.0165	0.0212	0.0191	0.0206	0.0142	0.0176	0.0171	0.0142
28	0.0115	0.0080	0.0038	0.0073	0.0070	0.0100	0.0030	0.0063	0.0035	0.0032
29	0.0014	0.0014	0.0010	0.0013	0.0009	0.0009	0.0010	0.0015	0.0009	0.0011
30	0.0072	0.0101	0.0017	0.0070	0.0048	0.0053	0.0017	0.0020	0.0019	0.0011
31	0.0134	0.0115	0.0140	0.0124	0.0120	0.0131	0.0117	0.0159	0.0148	0.0097
32	0.0162	0.0182	0.0079	0.0269	0.0278	0.0410	0.0076	0.0158	0.0083	0.0070
33	0.0003	0.0005	0.0003	0.0065	0.0003	0.0003	0.0002	0.0017	0.0010	0.0003
34	0.0001	0.0015	0.0001	0.0002	0.0002	0.0002	0.0001	0.0002	0.0002	0.0002
35	0.0007	0.0018	0.0005	0.0009	0.0006	0.0007	0.0005	0.0007	0.0006	0.0004
36	0.0066	0.0129	0.0143	0.0079	0.0077	0.0049	0.0159	0.0061	0.0126	0.0149
37	0.2913	0.1946	0.1896	0.2409	0.2688	0.2056	0.1462	0.1622	0.1905	0.1468
38	0.1122	0.1327	0.1032	0.0452	0.0463	0.0573	0.0515	0.0628	0.0832	0.0872
39	0.0011	0.0014	0.0006	0.0010	0.0008	0.0009	0.0005	0.0007	0.0006	0.0005
40	0.0005	0.0005	0.0029	0.0015	0.0124	0.0074	0.0059	0.0218	0.0097	0.0007
41	1.0263	0.0147	0.0351	0.0381	0.0191	0.0214	0.0151	0.0138	0.0113	0.0112
42	0.0191	1.0528	0.0223	0.0243	0.0321	0.0230	0.0127	0.0264	0.0307	0.0295
43	0.0007	0.0007	1.1018	0.0544	0.0366	0.0110	0.0008	0.0092	0.0043	0.0006
44	0.0001	0.0002	0.0002	1.0526	0.0002	0.0002	0.0001	0.0002	0.0002	0.0002
45	0.0009	0.0009	0.0008	0.0008	1.0477	0.0007	0.0006	0.0006	0.0007	0.0007
46	0.0006	0.0006	0.0047	0.0007	0.0008	1.0845	0.0013	0.0006	0.0006	0.0006
47	0.0105	0.0133	0.0404	0.0234	0.0427	0.0240	1.0958	0.0275	0.0252	0.0454
48	0.0017	0.0009	0.0005	0.0006	0.0006	0.0006	0.0006	1.0744	0.0005	0.0004
49	0.0035	0.0039	0.0456	0.1073	0.0768	0.0699	0.0490	0.0618	1.0986	0.0060
50	0.0037	0.0032	0.0419	0.0397	0.0097	0.0300	0.0020	0.0060	0.0028	1.1290
51	0.0001	0.0002	0.0001	0.0002	0.0001	0.0003	0.0001	0.0001	0.0001	0.0001
52	0.0004	0.0004	0.0004	0.0006	0.0005	0.0004	0.0004	0.0005	0.0004	0.0003

MATRIX ': RAS INVERSE

COLUMN / ROW	41	42	43	44	45	46	47	48	49	50
53	0.0037	0.0072	0.0196	0.0098	0.0212	0.0531	0.0358	0.0400	0.0303	0.0055
54	0.0002	0.0002	0.0002	0.0016	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
55	0.0007	0.0006	0.0008	0.0050	0.0006	0.0008	0.0006	0.0007	0.0011	0.0004
56	0.0003	0.0003	0.0003	0.0004	0.0003	0.0004	0.0004	0.0004	0.0004	0.0003
57	0.0003	0.0009	0.0009	0.0008	0.0009	0.0015	0.0011	0.0012	0.0028	0.0004
58	0.0004	0.0004	0.0218	0.0127	0.0024	0.0041	0.0004	0.0007	0.0007	0.0073
59	0.0010	0.0011	0.0052	0.0142	0.0045	0.0012	0.0009	0.0010	0.0010	0.0010
60	0.0004	0.0003	0.0003	0.0004	0.0004	0.0004	0.0008	0.0003	0.0003	0.0003
61	0.0005	0.0004	0.0004	0.0008	0.0004	0.0004	0.0003	0.0004	0.0004	0.0004
62	0.0008	0.0008	0.0049	0.0032	0.0016	0.0014	0.0011	0.0033	0.0089	0.0008
63	0.0007	0.0007	0.0007	0.0010	0.0007	0.0008	0.0007	0.0007	0.0007	0.0007
64	0.0015	0.0036	0.0015	0.0017	0.0016	0.0017	0.0016	0.0015	0.0016	0.0015
65	0.0528	0.0487	0.0459	0.0563	0.0498	0.0502	0.0360	0.0413	0.0421	0.0410
66	0.0109	0.0099	0.0105	0.0106	0.0106	0.0125	0.0103	0.0110	0.0113	0.0100
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
68	0.0336	0.0336	0.0271	0.0284	0.0293	0.0255	0.0254	0.0243	0.0282	0.0276
69	0.0523	0.0603	0.0669	0.0750	0.0672	0.0720	0.0548	0.0664	0.0596	0.0513
70	0.0202	0.0196	0.0154	0.0220	0.0245	0.0201	0.0177	0.0200	0.0163	0.0210
71	0.0277	0.0277	0.0184	0.0238	0.0237	0.0293	0.0240	0.0470	0.0236	0.0301
72	0.0031	0.0036	0.0037	0.0042	0.0037	0.0039	0.0041	0.0038	0.0037	0.0039
73	0.0375	0.0416	0.0402	0.0532	0.0381	0.0422	0.0368	0.0371	0.0389	0.0383
74	0.0033	0.0036	0.0039	0.0042	0.0039	0.0042	0.0032	0.0037	0.0036	0.0033
75	0.0006	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0009
76	0.0015	0.0017	0.0018	0.0018	0.0019	0.0022	0.0018	0.0020	0.0019	0.0018
77	0.0035	0.0037	0.0038	0.0046	0.0040	0.0044	0.0037	0.0042	0.0040	0.0038
78	0.0005	0.0005	0.0006	0.0005	0.0005	0.0005	0.0004	0.0004	0.0005	0.0004
79	1.9452	1.9280	2.0362	2.1608	2.0567	2.0573	1.7763	1.9385	1.8920	1.8502

MATRIX ': RAS INVERSE

COLUMN	51	52	53	54	55	56	57	58	59	60
ROW										
1	0.0028	0.0028	0.0027	0.0032	0.0030	0.0026	0.0032	0.0026	0.0027	0.0027
2	0.0024	0.0025	0.0025	0.0033	0.0027	0.0024	0.0028	0.0025	0.0033	0.0025
3	0.0004	0.0011	0.0007	0.0011	0.0008	0.0008	0.0008	0.0006	0.0006	0.0004
4	0.0002	0.0003	0.0003	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
5	0.0021	0.0081	0.0062	0.0081	0.0076	0.0019	0.0026	0.0038	0.0111	0.0035
6	0.0034	0.0099	0.0104	0.0089	0.0117	0.0044	0.0074	0.0176	0.0051	0.0078
7	0.0020	0.0055	0.0046	0.0061	0.0045	0.0021	0.0029	0.0037	0.0070	0.0028
8	0.0046	0.0081	0.0087	0.0081	0.0119	0.0053	0.0069	0.0068	0.0078	0.0067
9	0.0007	0.0023	0.0022	0.0028	0.0027	0.0009	0.0023	0.0020	0.0020	0.0011
10	0.0003	0.0007	0.0006	0.0009	0.0008	0.0004	0.0009	0.0011	0.0006	0.0003
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0093	0.0115	0.0103	0.0110	0.0103	0.0082	0.0108	0.0088	0.0118	0.0089
13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0022	0.0000	0.0000	0.0000	0.0001
14	0.0086	0.0080	0.0083	0.0093	0.0087	0.0080	0.0099	0.0076	0.0061	0.0084
15	0.0006	0.0005	0.0006	0.0006	0.0006	0.0006	0.0007	0.0005	0.0003	0.0006
16	0.0020	0.0041	0.0035	0.0080	0.0039	0.0039	0.0030	0.0051	0.0130	0.0034
17	0.0016	0.0043	0.0023	0.0040	0.0051	0.0018	0.0017	0.0029	0.0100	0.0013
18	0.0016	0.0021	0.0021	0.0021	0.0022	0.0020	0.0027	0.0020	0.0019	0.0020
19	0.0001	0.0003	0.0002	0.0003	0.0003	0.0002	0.0002	0.0003	0.0170	0.0002
20	0.0034	0.0105	0.0059	0.0105	0.0070	0.0078	0.0065	0.0047	0.0060	0.0038
21	0.0006	0.0043	0.0008	0.0024	0.0008	0.0008	0.0008	0.0008	0.0006	0.0006
22	0.0000	0.0000	0.0000	0.0000	0.0000	0.0181	0.0000	0.0000	0.0001	0.0008
23	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0036
24	0.0122	0.0160	0.0204	0.0219	0.0212	0.0156	0.0325	0.0142	0.0090	0.0081
25	0.0045	0.0132	0.0074	0.0220	0.0264	0.0076	0.0126	0.0137	0.0059	0.0040
26	0.0038	0.0040	0.0057	0.0059	0.0034	0.0071	0.0041	0.0030	0.0030	0.0041
27	0.0139	0.0305	0.0274	0.0384	0.0343	0.0185	0.0431	0.0518	0.0242	0.0133
28	0.0065	0.0111	0.0112	0.0230	0.0223	0.0109	0.0143	0.0192	0.0133	0.0063
29	0.0008	0.0010	0.0009	0.0013	0.0010	0.0009	0.0010	0.0008	0.0009	0.0010
30	0.0018	0.0104	0.0053	0.0123	0.0073	0.0019	0.0025	0.0013	0.0094	0.0025
31	0.0073	0.0127	0.0140	0.0120	0.0208	0.0083	0.0100	0.0097	0.0121	0.0106
32	0.0205	0.0353	0.0210	0.0690	0.0366	0.0183	0.0274	0.0543	0.0417	0.0113
33	0.0001	0.0002	0.0002	0.0005	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
34	0.0002	0.0002	0.0002	0.0011	0.0002	0.0002	0.0002	0.0001	0.0002	0.0002
35	0.0043	0.0028	0.0027	0.0041	0.0414	0.0117	0.0400	0.0019	0.0163	0.0017
36	0.0023	0.0140	0.0147	0.0188	0.0136	0.0036	0.0112	0.0113	0.0072	0.0058
37	0.0364	0.1486	0.1126	0.1475	0.1032	0.0329	0.0423	0.0612	0.2076	0.0631
38	0.0407	0.1206	0.1274	0.1077	0.1432	0.0532	0.0886	0.2154	0.0615	0.0958
39	0.0005	0.0014	0.0010	0.0017	0.0012	0.0006	0.0010	0.0010	0.0012	0.0007
40	0.0006	0.0031	0.0033	0.0011	0.0006	0.0004	0.0005	0.0006	0.0009	0.0006
41	0.0223	0.0465	0.0200	0.0468	0.0335	0.0296	0.0372	0.0148	0.0579	0.0212
42	0.0199	0.0608	0.0290	0.0558	0.0295	0.0244	0.0242	0.0194	0.0531	0.0243
43	0.0004	0.0021	0.0043	0.0011	0.0007	0.0005	0.0005	0.0007	0.0053	0.0008
44	0.0002	0.0002	0.0001	0.0003	0.0002	0.0002	0.0002	0.0001	0.0002	0.0002
45	0.0003	0.0008	0.0007	0.0008	0.0008	0.0003	0.0005	0.0008	0.0007	0.0005
46	0.0003	0.0005	0.0005	0.0005	0.0005	0.0003	0.0004	0.0005	0.0005	0.0004
47	0.0110	0.0142	0.0175	0.0165	0.0118	0.0134	0.0121	0.0155	0.0265	0.0333
48	0.0003	0.0008	0.0006	0.0009	0.0011	0.0004	0.0008	0.0009	0.0008	0.0004
49	0.0078	0.0198	0.0138	0.0103	0.0032	0.0025	0.0017	0.0196	0.0148	0.0112
50	0.0009	0.0028	0.0036	0.0041	0.0026	0.0048	0.0015	0.0030	0.0206	0.0605
51	1.2279	0.0002	0.0001	0.0003	0.0002	0.0044	0.0002	0.0001	0.0002	0.0004
52	0.0003	1.0726	0.0003	0.0252	0.0003	0.0004	0.0003	0.0003	0.0082	0.0004

MATRIX' : RAS INVERSE

COLUMN	51	52	53	54	55	56	57	58	59	60
ROW										
53	0.0197	0.1002	1.0852	0.0584	0.0272	0.0219	0.0038	0.0210	0.0063	0.0066
54	0.0002	0.0002	0.0002	1.0175	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
55	0.0108	0.0075	0.0089	0.0130	1.0383	0.0102	0.0053	0.0108	0.0079	0.0018
56	0.0008	0.0005	0.0019	0.0004	0.0004	1.0726	0.0015	0.0003	0.0049	0.0469
57	0.0847	0.0029	0.0230	0.0021	0.0013	0.1901	1.0600	0.0057	0.0027	0.0210
58	0.0007	0.0151	0.0028	0.0014	0.0355	0.0024	0.0005	1.0526	0.0140	0.0039
59	0.0008	0.0012	0.0010	0.0011	0.0012	0.0010	0.0010	0.0034	1.5153	0.0010
60	0.0002	0.0004	0.0003	0.0004	0.0003	0.0016	0.0003	0.0003	0.0004	1.2045
61	0.0002	0.0004	0.0004	0.0005	0.0004	0.0003	0.0003	0.0004	0.0005	0.0003
62	0.0007	0.0209	0.0024	0.0284	0.0007	0.0011	0.0007	0.0012	0.0103	0.0210
63	0.0007	0.0008	0.0007	0.0012	0.0007	0.0010	0.0008	0.0006	0.0009	0.0045
64	0.0016	0.0042	0.0017	0.0139	0.0016	0.0015	0.0019	0.0019	0.0017	0.0016
65	0.0276	0.0493	0.0431	0.0531	0.0495	0.0304	0.0381	0.0431	0.0582	0.0344
66	0.0121	0.0117	0.0107	0.0108	0.0095	0.0125	0.0119	0.0087	0.0085	0.0149
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
68	0.0153	0.0288	0.0283	0.0319	0.0296	0.0188	0.0284	0.0288	0.0277	0.0228
69	0.0465	0.0858	0.0605	0.0795	0.0757	0.0616	0.0697	0.0729	0.0682	0.0487
70	0.0160	0.0171	0.0188	0.0173	0.0143	0.0130	0.0155	0.0139	0.0167	0.0137
71	0.0293	0.0270	0.0260	0.0285	0.0276	0.0276	0.0279	0.0222	0.0211	0.0210
72	0.0038	0.0033	0.0040	0.0039	0.0038	0.0038	0.0049	0.0037	0.0029	0.0070
73	0.0383	0.0424	0.0353	0.0881	0.0459	0.0494	0.0450	0.0346	0.0412	0.0466
74	0.0029	0.0040	0.0036	0.0039	0.0037	0.0038	0.0038	0.0034	0.0175	0.0040
75	0.0010	0.0008	0.0009	0.0009	0.0009	0.0009	0.0011	0.0008	0.0006	0.0010
76	0.0018	0.0020	0.0019	0.0017	0.0016	0.0023	0.0022	0.0015	0.0013	0.0026
77	0.0039	0.0042	0.0035	0.0061	0.0037	0.0046	0.0042	0.0031	0.0041	0.0042
78	0.0004	0.0005	0.0005	0.0006	0.0005	0.0004	0.0005	0.0005	0.0005	0.0004
79	1.8150	2.1647	1.9047	2.2069	2.0202	1.8809	1.8072	1.9448	2.5446	1.9791

MATRIX : RAS INVERSE

COLUMN / ROW	61	62	63	64	65	66	67	68	69	70
1	0.0034	0.0056	0.0027	0.0052	0.0027	0.0011	0.0056	0.0012	0.0021	0.0027
2	0.0032	0.0082	0.0025	0.0087	0.0022	0.0010	0.0039	0.0010	0.0016	0.0023
3	0.0051	0.0007	0.0008	0.0047	0.0004	0.0003	0.0003	0.0004	0.0003	0.0004
4	0.0006	0.0006	0.0003	0.0008	0.0002	0.0001	0.0003	0.0001	0.0018	0.0002
5	0.0116	0.0037	0.0019	0.0032	0.0009	0.0002	0.0002	0.0004	0.0001	0.0002
6	0.0063	0.0074	0.0054	0.0059	0.0006	0.0003	0.0002	0.0003	0.0002	0.0002
7	0.0071	0.0031	0.0037	0.0035	0.0014	0.0007	0.0009	0.0388	0.0012	0.0017
8	0.0082	0.0064	0.0052	0.0076	0.0263	0.0058	0.0042	0.1071	0.0093	0.0060
9	0.0020	0.0013	0.0013	0.0018	0.0011	0.0006	0.0004	0.0011	0.0004	0.0005
10	0.0006	0.0006	0.0020	0.0010	0.0002	0.0001	0.0002	0.0002	0.0001	0.0001
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0114	0.0105	0.0088	0.0117	0.0422	0.0338	0.0157	0.0561	0.0136	0.0160
13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
14	0.0081	0.0163	0.0084	0.0114	0.0088	0.0037	0.0140	0.0040	0.0058	0.0089
15	0.0005	0.0008	0.0005	0.0005	0.0003	0.0003	0.0011	0.0003	0.0004	0.0006
16	0.0080	0.0282	0.0033	0.0316	0.0011	0.0005	0.0005	0.0005	0.0006	0.0007
17	0.0112	0.0033	0.0012	0.0122	0.0011	0.0002	0.0002	0.0003	0.0004	0.0003
18	0.0027	0.0029	0.0015	0.0037	0.0008	0.0005	0.0002	0.0006	0.0002	0.0002
19	0.0049	0.0003	0.0003	0.0005	0.0002	0.0001	0.0001	0.0001	0.0002	0.0001
20	0.0554	0.0061	0.0063	0.0430	0.0036	0.0024	0.0016	0.0039	0.0027	0.0035
21	0.0004	0.0009	0.0002	0.0007	0.0001	0.0000	0.0001	0.0000	0.0005	0.0000
22	0.0070	0.0000	0.0000	0.0028	0.0001	0.0002	0.0001	0.0000	0.0000	0.0000
23	0.0014	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
24	0.0119	0.0181	0.0443	0.0515	0.0054	0.0047	0.0052	0.0039	0.0161	0.0263
25	0.0047	0.0113	0.0108	0.0255	0.0016	0.0006	0.0010	0.0007	0.0063	0.0016
26	0.0035	0.0056	0.0035	0.0049	0.0052	0.0046	0.0080	0.0028	0.0055	0.0343
27	0.0217	0.0243	0.0982	0.0450	0.0078	0.0028	0.0080	0.0077	0.0042	0.0055
28	0.0119	0.0140	0.0102	0.0471	0.0024	0.0010	0.0008	0.0010	0.0015	0.0013
29	0.0010	0.0013	0.0009	0.0015	0.0007	0.0003	0.0009	0.0004	0.0010	0.0012
30	0.0078	0.0028	0.0009	0.0101	0.0024	0.0017	0.0009	0.0027	0.0008	0.0010
31	0.0128	0.0099	0.0075	0.0122	0.0530	0.0097	0.0053	0.0184	0.0155	0.0073
32	0.0214	0.0322	0.0183	0.0475	0.0083	0.0025	0.0018	0.0024	0.0033	0.0021
33	0.0003	0.0007	0.0005	0.0039	0.0000	0.0000	0.0001	0.0000	0.0001	0.0001
34	0.0002	0.0010	0.0019	0.0028	0.0001	0.0001	0.0005	0.0001	0.0002	0.0001
35	0.0061	0.0068	0.0150	0.0066	0.0009	0.0005	0.0005	0.0006	0.0006	0.0004
36	0.0091	0.0056	0.0044	0.0057	0.0022	0.0011	0.0007	0.0021	0.0010	0.0008
37	0.2185	0.0659	0.0236	0.0536	0.0158	0.0027	0.0023	0.0057	0.0023	0.0024
38	0.0765	0.0894	0.0589	0.0695	0.0062	0.0030	0.0020	0.0036	0.0015	0.0017
39	0.0011	0.0043	0.0014	0.0017	0.0008	0.0003	0.0005	0.0005	0.0004	0.0004
40	0.0433	0.0006	0.0004	0.0005	0.0017	0.0010	0.0005	0.0019	0.0005	0.0005
41	0.0129	0.0241	0.0054	0.0131	0.0015	0.0008	0.0005	0.0005	0.0007	0.0004
42	0.0402	0.0266	0.0105	0.0225	0.0056	0.0014	0.0011	0.0021	0.0016	0.0014
43	0.0302	0.0007	0.0005	0.0006	0.0023	0.0002	0.0004	0.0011	0.0004	0.0006
44	0.0002	0.0003	0.0002	0.0003	0.0001	0.0001	0.0003	0.0001	0.0002	0.0004
45	0.0025	0.0005	0.0005	0.0005	0.0004	0.0002	0.0002	0.0018	0.0002	0.0002
46	0.0009	0.0004	0.0004	0.0005	0.0003	0.0002	0.0001	0.0003	0.0001	0.0001
47	0.0105	0.0162	0.0010	0.0013	0.0014	0.0003	0.0002	0.0004	0.0003	0.0003
48	0.0008	0.0007	0.0013	0.0012	0.0002	0.0001	0.0001	0.0001	0.0001	0.0002
49	0.0499	0.0060	0.0010	0.0012	0.0015	0.0003	0.0002	0.0008	0.0003	0.0003
50	0.0105	0.0017	0.0018	0.0014	0.0014	0.0003	0.0002	0.0005	0.0003	0.0002
51	0.0001	0.0003	0.0002	0.0002	0.0001	0.0002	0.0003	0.0001	0.0002	0.0005
52	0.0033	0.0004	0.0003	0.0006	0.0005	0.0003	0.0004	0.0005	0.0004	0.0006

MATRIX : RAS INVERSE

COLUMN / ROW	61	62	63	64	65	66	67	68	69	70
53	0.0362	0.0205	0.0069	0.0063	0.0021	0.0007	0.0007	0.0016	0.0006	0.0009
54	0.0099	0.0002	0.0002	0.0002	0.0004	0.0002	0.0003	0.0004	0.0002	0.0002
55	0.0039	0.0077	0.0026	0.0025	0.0010	0.0006	0.0003	0.0021	0.0006	0.0003
56	0.0008	0.0005	0.0003	0.0005	0.0007	0.0143	0.0040	0.0003	0.0003	0.0007
57	0.0013	0.0211	0.0020	0.0039	0.0015	0.0026	0.0010	0.0003	0.0003	0.0003
58	0.0025	0.0013	0.0004	0.0005	0.0032	0.0006	0.0003	0.0005	0.0009	0.0004
59	0.0144	0.0011	0.0008	0.0011	0.0075	0.0016	0.0007	0.0013	0.0022	0.0010
60	0.0004	0.0010	0.0002	0.0003	0.0074	0.0001	0.0002	0.0003	0.0001	0.0001
61	1.0897	0.0004	0.0003	0.0005	0.0082	0.0001	0.0002	0.0005	0.0002	0.0002
62	0.0025	1.0882	0.0004	0.0007	0.0006	0.0002	0.0002	0.0004	0.0002	0.0003
63	0.0007	0.0052	1.0457	0.0016	0.0006	0.0007	0.0082	0.0005	0.0008	0.0028
64	0.0025	0.0056	0.0012	1.0854	0.0011	0.0012	0.0034	0.0009	0.0015	0.0043
65	0.0565	0.0388	0.0342	0.0472	1.1061	0.0103	0.0236	0.0455	0.0207	0.0210
66	0.0094	0.0152	0.0109	0.0111	0.0138	1.0092	0.0467	0.0067	0.0139	0.0349
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0089	0.0000	0.0000	0.0000
68	0.0287	0.0232	0.0206	0.0243	0.0162	0.0167	0.0224	1.2819	0.0274	0.0338
69	0.0690	0.0694	0.0557	0.0784	0.0452	0.0181	0.0292	0.0223	1.0284	0.0265
70	0.0180	0.0184	0.0133	0.0173	0.0288	0.0134	0.0240	0.0195	0.0252	1.2276
71	0.0258	0.0312	0.0259	0.0337	0.0418	0.0261	0.0742	0.0379	0.0688	0.0766
72	0.0038	0.0055	0.0040	0.0041	0.0019	0.0017	0.0057	0.0014	0.0044	0.0034
73	0.0385	0.0744	0.0508	0.0594	0.0326	0.0243	0.0682	0.0355	0.0605	0.1060
74	0.0040	0.0040	0.0031	0.0039	0.0190	0.0086	0.0032	0.0044	0.0098	0.0049
75	0.0008	0.0012	0.0008	0.0009	0.0005	0.0007	0.4645	0.0004	0.0021	0.0011
76	0.0015	0.0022	0.0017	0.0017	0.0021	0.0014	0.0027	0.0011	0.0018	0.0141
77	0.0038	0.0057	0.0041	0.0056	0.0041	0.0058	0.0047	0.0057	0.0070	0.0255
78	0.0005	0.0005	0.0004	0.0005	0.0017	0.0006	0.0005	0.0006	0.0008	0.0007
79	2.1984	1.9210	1.6667	1.9851	1.5719	1.2531	1.8905	1.7514	1.3858	1.7247

MATRIX : RAS INVERSE

COLUMN / ROW	71	72	73	74	75	76	77	78	79
1	0.0007	0.0036	0.0046	0.0017	0.0082	0.0064	0.0018	0.0013	2.7166
2	0.0010	0.0039	0.0037	0.0016	0.0048	0.0057	0.0016	0.0013	2.7946
3	0.0006	0.0005	0.0004	0.0003	0.0004	0.0004	0.0002	0.0011	1.3415
4	0.0003	0.0003	0.0003	0.0003	0.0004	0.0004	0.0001	0.0003	1.2439
5	0.0003	0.0005	0.0004	0.0015	0.0003	0.0003	0.0002	0.0009	1.4298
6	0.0003	0.0008	0.0004	0.0012	0.0004	0.0003	0.0002	0.0008	1.6131
7	0.0005	0.0016	0.0017	0.0017	0.0011	0.0021	0.0143	0.0179	1.6125
8	0.0028	0.0092	0.0066	0.0099	0.0054	0.0075	0.0065	0.0247	2.3985
9	0.0017	0.0012	0.0005	0.0017	0.0007	0.0008	0.0004	0.0036	1.2998
10	0.0001	0.0004	0.0003	0.0003	0.0004	0.0002	0.0001	0.0007	1.1533
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0000
12	0.1029	0.0215	0.0121	0.0111	0.0297	0.0342	0.0165	0.1944	2.5124
13	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0331
14	0.0019	0.0100	0.0150	0.0047	0.0146	0.0209	0.0055	0.0040	2.9261
15	0.0001	0.0006	0.0011	0.0003	0.0011	0.0006	0.0004	0.0002	1.3463
16	0.0003	0.0121	0.0009	0.0031	0.0007	0.0011	0.0018	0.0009	3.3341
17	0.0002	0.0028	0.0004	0.0022	0.0004	0.0005	0.0012	0.0005	1.7030
18	0.0002	0.0058	0.0003	0.0011	0.0003	0.0003	0.0002	0.0005	1.3615
19	0.0000	0.0067	0.0002	0.0022	0.0001	0.0007	0.0013	0.0004	1.2478
20	0.0059	0.0039	0.0025	0.0025	0.0028	0.0033	0.0018	0.0119	3.1745
21	0.0000	0.0001	0.0001	0.0002	0.0001	0.0001	0.0000	0.0001	1.1045
22	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0586
23	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0347
24	0.0026	0.0134	0.0143	0.0066	0.0079	0.0120	0.0066	0.0100	3.4394
25	0.0006	0.0050	0.0023	0.0032	0.0015	0.0021	0.0009	0.0015	1.9021
26	0.0019	0.0047	0.0214	0.0027	0.0146	0.0238	0.0059	0.0045	1.6223
27	0.0064	0.0161	0.0117	0.0124	0.0187	0.0090	0.0041	0.0223	4.6307
28	0.0011	0.0053	0.0015	0.0075	0.0013	0.0016	0.0016	0.0023	2.4638
29	0.0002	0.0186	0.0059	0.0006	0.0010	0.0199	0.0013	0.0010	1.2860
30	0.0047	0.0021	0.0013	0.0085	0.0016	0.0018	0.0009	0.0089	1.3750
31	0.0052	0.0155	0.0094	0.0181	0.0076	0.0093	0.0109	0.0196	2.3266
32	0.0021	0.0102	0.0032	0.0294	0.0024	0.0040	0.0036	0.0044	2.4248
33	0.0000	0.0034	0.0001	0.0001	0.0003	0.0001	0.0001	0.0001	1.4965
34	0.0000	0.0107	0.0003	0.0001	0.0011	0.0002	0.0002	0.0001	1.0645
35	0.0007	0.0023	0.0007	0.0091	0.0008	0.0012	0.0004	0.0015	1.4038
36	0.0027	0.0064	0.0015	0.0135	0.0012	0.0014	0.0009	0.0084	1.6873
37	0.0050	0.0081	0.0060	0.0273	0.0036	0.0039	0.0038	0.0134	6.7163
38	0.0034	0.0088	0.0044	0.0140	0.0034	0.0028	0.0018	0.0077	4.4940
39	0.0005	0.0010	0.0007	0.0009	0.0007	0.0012	0.0003	0.0011	1.2758
40	0.0034	0.0008	0.0005	0.0005	0.0010	0.0011	0.0006	0.0059	1.3252
41	0.0004	0.0025	0.0012	0.0175	0.0006	0.0008	0.0008	0.0011	1.7533
42	0.0022	0.0072	0.0025	0.0145	0.0017	0.0019	0.0014	0.0050	2.4401
43	0.0002	0.0004	0.0049	0.0040	0.0004	0.0003	0.0006	0.0008	1.3865
44	0.0001	0.0002	0.0038	0.0001	0.0003	0.0002	0.0001	0.0002	1.0939
45	0.0005	0.0003	0.0008	0.0003	0.0003	0.0003	0.0006	0.0016	1.2544
46	0.0006	0.0002	0.0001	0.0002	0.0002	0.0002	0.0001	0.0011	1.1583
47	0.0002	0.0009	0.0015	0.0036	0.0003	0.0003	0.0004	0.0007	1.6366
48	0.0001	0.0004	0.0002	0.0003	0.0003	0.0002	0.0001	0.0004	1.1976
49	0.0005	0.0006	0.0011	0.0021	0.0003	0.0004	0.0004	0.0012	1.8167
50	0.0002	0.0005	0.0007	0.0141	0.0003	0.0003	0.0004	0.0007	1.5354
51	0.0001	0.0002	0.0036	0.0001	0.0003	0.0001	0.0001	0.0002	1.2492
52	0.0008	0.0006	0.0045	0.0009	0.0005	0.0004	0.0003	0.0015	1.1653

MATRIX ' : RAS INVERSE

COLUMN / ROW	71	72	73	74	75	76	77	78	79
53	0.0008	0.0038	0.0063	0.0031	0.0009	0.0008	0.0006	0.0022	1.8060
54	0.0006	0.0104	0.0003	0.0001	0.0004	0.0004	0.0003	0.0011	1.0643
55	0.0011	0.0013	0.0005	0.0024	0.0005	0.0006	0.0005	0.0052	1.2483
56	0.0002	0.0004	0.0008	0.0006	0.0005	0.0005	0.0002	0.0004	1.2361
57	0.0001	0.0301	0.0008	0.0005	0.0004	0.0006	0.0003	0.0003	1.5211
58	0.0002	0.0008	0.0018	0.0205	0.0004	0.0005	0.0006	0.0009	1.2523
59	0.0005	0.0021	0.0017	0.1228	0.0010	0.0013	0.0036	0.0024	1.8116
60	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0009	0.0002	1.4004
61	0.0001	0.0009	0.0009	0.0002	0.0003	0.0002	0.0011	0.0012	1.1605
62	0.0005	0.0008	0.0006	0.0010	0.0003	0.0082	0.0002	0.0010	1.2712
63	0.0003	0.0100	0.0081	0.0005	0.0201	0.0030	0.0005	0.0008	1.1717
64	0.0009	0.0250	0.0061	0.0009	0.0075	0.0031	0.0008	0.0020	1.3309
65	0.0090	0.0263	0.0309	0.0261	0.0269	0.0217	0.1329	0.0323	4.9793
66	0.0036	0.0126	0.0185	0.0112	0.0125	0.0154	0.0043	0.0087	1.8304
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0009	0.0000	0.0000	1.0099
68	0.0059	0.0268	0.0288	0.0195	0.0236	0.0414	0.0182	0.1294	3.7007
69	0.0169	0.0474	0.0391	0.1388	0.0361	0.0316	0.0176	0.0337	5.6902
70	0.0302	0.0252	0.0157	0.0273	0.0284	0.0139	0.0089	0.0256	2.7293
71	1.0445	0.0737	0.0685	0.0469	0.1340	0.0966	0.0340	0.0242	4.2828
72	0.0007	1.0297	0.0057	0.0028	0.0064	0.0078	0.0025	0.0016	1.3047
73	0.0217	0.0465	1.0684	0.0304	0.0708	0.0352	0.0272	0.0513	4.5912
74	0.0018	0.0103	0.0088	1.0070	0.0050	0.0063	0.0056	0.0048	1.4103
75	0.0002	0.0012	0.0017	0.0006	1.3494	0.0032	0.0006	0.0004	1.8735
76	0.0009	0.0038	0.0029	0.0014	0.0041	1.0104	0.0007	0.0021	1.1733
77	0.0050	0.0054	0.0280	0.0031	0.0051	0.0094	1.0018	0.0036	1.3774
78	0.0002	0.0008	0.0008	0.0007	0.0005	0.0009	0.0006	1.0007	1.0472
79	1.3119	1.6275	1.5076	1.7285	1.8813	1.5003	1.3678	1.7287	152.3358

Appendix 7

PERCENTAGE COMPARISONS OF THE INVERSES
(78-Industry Level)

BEA/MRIO

UN/MRIO

OBE/MRIO

RAS/MRIO

BEA/UN

MATRIX • : % DIFFERENCE IN MULTIPLIERS: BEA/MRIO

COLUMN / ROW	1	2	3	4	5	6	7	8	9	10
1	0.	3.	153.	21.	103.	55.	56.	142.	61.	55.
2	1.	0.	315.	39.	116.	57.	61.	167.	69.	55.
3	8.	21.	0.	42.	20.	5.	5.	17.	52.	27.
4	2.	2.	14.	1.	149.	62.	61.	236.	75.	67.
5	23.	21.	34.	87.	0.	11.	10.	19.	24.	17.
6	28.	22.	49.	78.	88.	0.	31.	26.	92.	29.
7	17.	23.	55.	78.	5.	9.	0.	35.	41.	11.
8	14.	16.	32.	185.	19.	32.	15.	0.	46.	16.
9	8.	5.	151.	230.	3.	26.	19.	9.	1.	2.
10	9.	5.	197.	289.	18.	30.	12.	21.	47.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	8.	8.	112.	127.	16.	16.	13.	3.	26.	22.
13	50.	54.	32.	57.	86.	70.	105.	50.	120.	186.
14	1.	7.	42.	14.	29.	18.	18.	31.	30.	22.
15	13.	17.	11.	21.	16.	8.	8.	10.	26.	11.
16	29.	25.	16.	27.	48.	24.	30.	66.	41.	20.
17	7.	6.	2.	4.	25.	16.	13.	22.	20.	26.
18	18.	29.	19.	28.	27.	18.	20.	33.	57.	22.
19	3.	3.	21.	84.	46.	35.	37.	57.	97.	54.
20	17.	17.	53.	32.	17.	4.	4.	12.	58.	22.
21	4.	2.	102.	16.	46.	24.	24.	74.	44.	29.
22	106.	137.	13.	271.	125.	79.	68.	95.	405.	140.
23	25.	17.	26.	250.	64.	96.	78.	20.	203.	95.
24	24.	56.	43.	14.	93.	50.	49.	64.	53.	27.
25	5.	11.	22.	3.	34.	22.	19.	36.	43.	28.
26	33.	70.	53.	104.	79.	47.	52.	59.	65.	50.
27	8.	5.	112.	204.	11.	4.	6.	10.	16.	9.
28	19.	22.	12.	24.	21.	15.	10.	24.	17.	23.
29	3.	21.	83.	38.	32.	36.	27.	39.	88.	18.
30	10.	11.	10.	61.	19.	17.	15.	4.	27.	23.
31	5.	4.	25.	164.	6.	10.	5.	9.	11.	6.
32	8.	8.	38.	80.	8.	5.	3.	12.	3.	9.
33	15.	21.	59.	16.	62.	40.	57.	63.	116.	46.
34	4.	13.	31.	3.	36.	17.	20.	30.	30.	20.
35	4.	19.	24.	37.	34.	35.	21.	17.	32.	35.
36	12.	9.	47.	94.	7.	10.	9.	3.	223.	19.
37	16.	20.	18.	38.	7.	6.	6.	13.	13.	6.
38	26.	27.	26.	38.	19.	21.	21.	20.	26.	14.
39	3.	10.	5.	52.	25.	17.	19.	22.	39.	34.
40	11.	11.	29.	139.	14.	7.	11.	3.	16.	9.
41	7.	19.	31.	44.	24.	21.	18.	26.	22.	21.
42	6.	7.	9.	3.	15.	8.	6.	11.	27.	14.
43	12.	9.	32.	182.	3.	2.	1.	4.	2.	2.
44	4.	2.	862.	582.	74.	101.	133.	121.	121.	108.
45	20.	20.	73.	154.	2.	1.	0.	2.	3.	0.
46	13.	14.	72.	101.	24.	3.	12.	8.	2.	0.
47	27.	25.	32.	42.	10.	9.	6.	25.	19.	13.
48	17.	12.	52.	71.	29.	12.	23.	37.	39.	38.
49	19.	13.	28.	155.	14.	12.	9.	5.	4.	6.
50	13.	11.	45.	133.	58.	1.	4.	27.	7.	5.
51	98.	100.	263.	384.	118.	146.	162.	161.	196.	155.
52	13.	13.	78.	160.	20.	27.	27.	12.	40.	36.

MATRIX 1: % DIFFERENCE IN MULTIPLIERS: BEA/MRIO

COLUMN	1	2	3	4	5	6	7	8	9	10
ROW										
53	25.	25.	23.	89.	19.	17.	6.	2.	8.	3.
54	13.	14.	20.	71.	25.	20.	19.	9.	37.	29.
55	14.	15.	1.	125.	22.	14.	2.	11.	29.	6.
56	32.	40.	61.	92.	49.	35.	86.	13.	105.	54.
57	64.	92.	85.	120.	73.	98.	106.	10.	115.	56.
58	5.	4.	12.	175.	10.	9.	7.	15.	9.	10.
59	12.	15.	51.	167.	17.	23.	16.	25.	9.	25.
60	20.	37.	47.	42.	20.	87.	124.	36.	173.	36.
61	7.	11.	1.	63.	9.	4.	2.	16.	45.	7.
62	21.	27.	20.	119.	17.	19.	41.	9.	43.	41.
63	37.	46.	63.	103.	45.	35.	35.	46.	51.	37.
64	20.	26.	20.	42.	31.	9.	22.	20.	51.	23.
65	4.	9.	18.	32.	2.	6.	5.	5.	25.	3.
66	8.	11.	64.	85.	16.	12.	11.	18.	35.	7.
67	308.	2002.	2527.	1457.	2403.	1199.	1231.	1639.	2395.	488.
68	10.	11.	69.	94.	9.	5.	4.	13.	13.	4.
69	3.	6.	23.	41.	9.	6.	5.	8.	13.	7.
70	6.	7.	58.	76.	11.	4.	4.	8.	10.	6.
71	6.	4.	119.	86.	3.	5.	4.	1.	13.	8.
72	10.	18.	15.	24.	18.	10.	10.	11.	22.	14.
73	7.	7.	76.	122.	7.	10.	8.	11.	21.	11.
74	4.	4.	26.	102.	8.	7.	4.	5.	6.	6.
75	381.	574.	117.	213.	493.	213.	232.	230.	239.	259.
76	1.	8.	160.	43.	12.	7.	6.	14.	24.	3.
77	11.	15.	47.	72.	12.	9.	9.	14.	21.	6.
78	8.	13.	18.	51.	6.	4.	5.	6.	5.	2.

MATRIX : % DIFFERENCE IN MULTIPLIERS: BEA/MRIO

COLUMN / ROW	11	12	13	14	15	16	17	18	19	20
1	40.	37.	73.	2.	4.	9.	3.	15.	52.	182.
2	14.	41.	76.	4.	0.	2.	14.	5.	78.	261.
3	2.	2.	39.	2.	23.	32.	34.	2.	72.	0.
4	24.	31.	86.	7.	2.	4.	13.	9.	77.	33.
5	12.	14.	65.	15.	35.	36.	59.	41.	105.	35.
6	11.	13.	53.	35.	38.	36.	59.	37.	98.	43.
7	13.	17.	60.	13.	16.	13.	26.	16.	73.	26.
8	12.	8.	73.	18.	23.	61.	84.	54.	123.	30.
9	2.	2.	94.	13.	10.	20.	57.	27.	104.	36.
10	23.	23.	79.	16.	13.	22.	46.	29.	100.	43.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	23.	0.	68.	15.	13.	20.	28.	20.	62.	26.
13	19.	55.	-0.	43.	23.	41.	51.	27.	60.	45.
14	17.	11.	53.	0.	9.	12.	10.	15.	56.	37.
15	9.	6.	45.	11.	0.	13.	22.	8.	34.	11.
16	18.	26.	74.	31.	36.	1.	10.	1.	29.	37.
17	8.	15.	56.	14.	17.	5.	0.	6.	9.	8.
18	9.	7.	48.	8.	25.	144.	6.	0.	60.	5.
19	18.	33.	123.	4.	8.	74.	5.	3.	-0.	43.
20	1.	1.	32.	15.	18.	24.	34.	22.	46.	0.
21	16.	16.	16.	3.	1.	6.	20.	11.	76.	116.
22	1.	66.	57.	114.	127.	129.	80.	17.	350.	371.
23	0.	3.	245.	52.	53.	48.	75.	72.	205.	86.
24	36.	23.	95.	11.	18.	16.	17.	18.	63.	47.
25	15.	12.	60.	2.	2.	8.	12.	5.	26.	18.
26	83.	51.	79.	16.	15.	57.	70.	48.	91.	56.
27	16.	10.	59.	13.	9.	7.	20.	10.	70.	22.
28	15.	8.	49.	13.	3.	3.	5.	4.	49.	18.
29	13.	15.	58.	6.	5.	6.	12.	8.	68.	31.
30	4.	0.	136.	11.	18.	14.	35.	17.	80.	4.
31	4.	2.	56.	8.	7.	14.	23.	15.	65.	18.
32	8.	6.	19.	8.	17.	18.	11.	14.	7.	34.
33	25.	30.	70.	20.	23.	25.	46.	9.	454.	27.
34	18.	12.	68.	12.	14.	22.	23.	35.	110.	35.
35	6.	2.	102.	1.	25.	4.	31.	8.	85.	8.
36	1.	2.	132.	17.	16.	28.	66.	30.	105.	6.
37	6.	7.	54.	9.	23.	37.	55.	36.	88.	23.
38	6.	7.	45.	27.	32.	44.	60.	32.	80.	32.
39	15.	4.	83.	1.	5.	24.	35.	26.	91.	10.
40	0.	0.	180.	18.	17.	20.	32.	23.	74.	30.
41	11.	12.	125.	5.	28.	39.	47.	29.	109.	21.
42	4.	4.	67.	8.	3.	20.	34.	15.	61.	4.
43	15.	16.	172.	13.	9.	20.	34.	22.	76.	29.
44	25.	36.	72.	8.	2.	4.	19.	10.	78.	399.
45	3.	2.	85.	22.	23.	36.	58.	38.	103.	38.
46	2.	1.	64.	12.	15.	13.	27.	11.	59.	8.
47	21.	22.	118.	29.	27.	34.	63.	42.	119.	37.
48	27.	23.	101.	12.	27.	4.	14.	6.	77.	3.
49	10.	9.	85.	23.	24.	21.	36.	27.	111.	38.
50	19.	20.	151.	18.	22.	33.	54.	37.	89.	36.
51	106.	132.	102.	86.	76.	114.	123.	95.	214.	129.
52	2.	1.	218.	15.	9.	24.	32.	22.	64.	40.

MATRIX 1: % DIFFERENCE IN MULTIPLIERS: BEA/MRIO

COLUMN / ROW	11	12	13	14	15	16	17	18	19	20
53	7.	7.	45.	25.	23.	31.	50.	31.	108.	35.
54	2.	1.	103.	16.	14.	22.	30.	19.	49.	24.
55	1.	1.	131.	18.	25.	32.	47.	17.	89.	4.
56	13.	10.	23.	38.	43.	37.	47.	28.	68.	45.
57	55.	43.	29.	52.	63.	75.	85.	52.	159.	86.
58	8.	6.	34.	9.	8.	13.	26.	15.	57.	15.
59	48.	31.	208.	18.	24.	29.	37.	28.	66.	28.
60	65.	57.	36.	24.	37.	28.	38.	39.	105.	30.
61	20.	16.	223.	7.	11.	15.	20.	13.	57.	3.
62	5.	3.	70.	21.	21.	16.	59.	10.	62.	16.
63	33.	30.	37.	30.	29.	30.	44.	21.	58.	29.
64	10.	3.	56.	20.	23.	33.	3.	1.	45.	38.
65	5.	5.	55.	5.	9.	10.	14.	10.	47.	6.
66	11.	7.	33.	10.	19.	13.	18.	8.	32.	13.
67	2738.	1222.	1655.	1248.	6566.	2289.	1862.	1955.	2353.	2136.
68	12.	11.	55.	10.	14.	12.	23.	12.	55.	14.
69	3.	2.	50.	5.	7.	7.	9.	5.	27.	10.
70	8.	5.	43.	8.	9.	11.	18.	8.	35.	11.
71	13.	9.	52.	10.	9.	13.	21.	9.	43.	27.
72	10.	7.	45.	5.	5.	13.	17.	9.	27.	15.
73	5.	7.	44.	6.	3.	11.	18.	8.	42.	14.
74	5.	3.	40.	5.	7.	10.	17.	9.	41.	9.
75	349.	171.	305.	429.	531.	282.	295.	229.	289.	255.
76	8.	5.	35.	8.	12.	13.	15.	9.	35.	21.
77	13.	10.	38.	11.	7.	14.	18.	6.	31.	15.
78	5.	4.	55.	5.	14.	10.	18.	10.	40.	8.

MATRIX ..: % DIFFERENCE IN MULTIPLIERS: BEA/MRIO

COLUMN / ROW	21	22	23	24	25	26	27	28	29	30
1	132.	30.	46.	25.	34.	29.	73.	73.	39.	11.
2	160.	16.	59.	29.	37.	35.	56.	72.	38.	15.
3	26.	4.	10.	3.	7.	12.	9.	37.	57.	23.
4	63.	28.	46.	32.	41.	53.	57.	73.	47.	22.
5	5.	27.	13.	42.	88.	46.	13.	52.	43.	16.
6	52.	28.	44.	61.	53.	42.	11.	51.	67.	21.
7	13.	22.	17.	5.	12.	16.	15.	19.	36.	22.
8	30.	40.	38.	30.	27.	43.	312.	277.	103.	42.
9	35.	33.	19.	9.	14.	20.	25.	59.	36.	19.
10	54.	35.	37.	10.	14.	18.	4.	43.	48.	20.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	28.	23.	27.	23.	21.	14.	57.	51.	35.	29.
13	43.	48.	112.	41.	58.	83.	55.	48.	35.	20.
14	35.	17.	24.	7.	12.	9.	25.	36.	12.	4.
15	12.	10.	17.	12.	14.	4.	20.	26.	13.	7.
16	61.	3.	45.	18.	23.	25.	52.	93.	45.	62.
17	47.	3.	7.	24.	34.	13.	65.	250.	29.	109.
18	8.	8.	13.	11.	8.	24.	22.	23.	23.	14.
19	61.	23.	43.	131.	90.	49.	7.	53.	52.	24.
20	8.	2.	6.	2.	5.	10.	25.	28.	54.	35.
21	-0.	22.	22.	31.	45.	38.	18.	20.	17.	9.
22	883.	0.	18.	170.	136.	125.	209.	155.	238.	106.
23	79.	3688.	-0.	78.	91.	1361.	104.	92.	118.	91.
24	68.	25.	31.	1.	1.	3.	34.	13.	34.	31.
25	19.	6.	7.	3.	0.	9.	22.	20.	5.	10.
26	55.	54.	52.	42.	58.	0.	76.	90.	56.	33.
27	43.	17.	25.	9.	10.	8.	1.	8.	14.	6.
28	57.	8.	17.	9.	10.	13.	44.	0.	25.	2.
29	28.	16.	27.	12.	18.	17.	122.	21.	0.	15.
30	33.	2.	5.	19.	48.	9.	22.	51.	22.	C.
31	22.	16.	20.	9.	8.	13.	59.	57.	27.	6.
32	60.	3.	6.	7.	12.	10.	78.	73.	4.	51.
33	69.	7.	7.	14.	20.	32.	16.	31.	57.	22.
34	49.	21.	39.	24.	23.	13.	35.	39.	33.	13.
35	43.	5.	3.	27.	59.	35.	59.	72.	2.	35.
36	31.	22.	8.	28.	35.	34.	29.	67.	27.	23.
37	3.	15.	8.	35.	130.	54.	32.	63.	26.	9.
38	36.	18.	31.	57.	40.	44.	25.	63.	69.	14.
39	36.	11.	16.	19.	25.	21.	13.	37.	5.	1.
40	34.	47.	79.	25.	24.	18.	53.	61.	45.	35.
41	16.	21.	12.	41.	78.	55.	68.	88.	13.	28.
42	20.	2.	9.	5.	8.	15.	16.	45.	16.	26.
43	29.	43.	57.	16.	19.	19.	44.	49.	19.	30.
44	195.	54.	128.	45.	34.	27.	54.	43.	13.	22.
45	27.	39.	27.	20.	29.	31.	50.	63.	53.	42.
46	11.	15.	19.	8.	11.	13.	26.	36.	37.	25.
47	49.	37.	86.	38.	53.	57.	55.	82.	69.	48.
48	9.	14.	29.	5.	5.	5.	1.	40.	54.	19.
49	32.	60.	62.	8.	16.	29.	40.	55.	64.	40.
50	17.	39.	14.	43.	53.	48.	51.	75.	39.	29.
51	133.	123.	151.	113.	101.	84.	150.	120.	77.	98.
52	31.	45.	155.	30.	27.	19.	56.	43.	12.	27.

MATRIX ·: % DIFFERENCE IN MULTIPLIERS: BEA/MRIO

COLUMN	21	22	23	24	25	26	27	28	29	30
ROW										
53	26.	47.	84.	34.	38.	35.	40.	72.	49.	36.
54	24.	29.	34.	21.	20.	11.	43.	42.	24.	16.
55	31.	22.	30.	24.	29.	29.	57.	61.	31.	43.
56	39.	51.	117.	41.	35.	30.	60.	55.	58.	31.
57	81.	121.	360.	65.	53.	56.	120.	106.	124.	48.
58	25.	25.	85.	20.	18.	18.	41.	40.	24.	23.
59	44.	60.	95.	35.	30.	33.	68.	64.	53.	43.
60	24.	63.	121.	25.	22.	91.	49.	48.	62.	43.
61	19.	17.	18.	9.	10.	12.	29.	33.	22.	16.
62	16.	38.	148.	30.	20.	21.	57.	48.	85.	32.
63	28.	29.	39.	55.	50.	1.	55.	55.	44.	33.
64	43.	25.	35.	33.	27.	9.	56.	52.	43.	25.
65	9.	9.	13.	6.	6.	8.	24.	28.	19.	12.
66	15.	11.	13.	13.	11.	4.	23.	25.	22.	12.
67	1841.	2151.	1840.	2330.	2189.	1373.	2955.	3397.	8093.	2378.
68	16.	16.	18.	8.	12.	13.	15.	32.	31.	21.
69	14.	7.	13.	7.	9.	7.	20.	22.	14.	8.
70	17.	9.	10.	10.	12.	8.	30.	29.	20.	14.
71	21.	10.	16.	18.	15.	3.	68.	51.	27.	21.
72	11.	11.	18.	9.	8.	4.	23.	26.	9.	6.
73	19.	10.	16.	11.	10.	6.	29.	23.	4.	13.
74	15.	10.	14.	11.	10.	6.	28.	31.	20.	14.
75	186.	234.	259.	265.	307.	177.	309.	363.	656.	183.
76	19.	12.	15.	14.	12.	5.	29.	29.	21.	13.
77	18.	12.	15.	16.	17.	2.	31.	33.	14.	15.
78	15.	13.	16.	6.	10.	6.	16.	25.	23.	15.

MATRIX .: % DIFFERENCE IN MULTIPLIERS: BEA/MRIO

COLUMN / ROW	31	32	33	34	35	36	37	38	39	40
1	75.	36.	2.	4.	50.	33.	47.	40.	70.	42.
2	92.	27.	3.	9.	52.	26.	48.	39.	66.	47.
3	19.	38.	6.	9.	14.	17.	21.	15.	24.	52.
4	127.	39.	6.	13.	47.	40.	49.	42.	58.	57.
5	22.	54.	23.	42.	34.	9.	1.	43.	2.	16.
6	23.	66.	30.	53.	23.	40.	25.	0.	19.	17.
7	19.	27.	7.	19.	13.	4.	2.	21.	4.	18.
8	0.	122.	33.	46.	37.	38.	18.	20.	25.	32.
9	7.	60.	20.	38.	3.	1.	5.	9.	19.	26.
10	19.	42.	10.	30.	7.	15.	6.	26.	17.	28.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	7.	35.	17.	22.	24.	24.	15.	23.	19.	28.
13	51.	75.	46.	38.	39.	41.	180.	134.	95.	577.
14	22.	34.	1.	3.	18.	15.	19.	18.	25.	20.
15	15.	16.	11.	10.	9.	10.	12.	13.	11.	14.
16	56.	11.	85.	9.	44.	20.	33.	15.	32.	53.
17	36.	3.	73.	2.	30.	15.	42.	14.	37.	57.
18	17.	29.	21.	17.	6.	7.	6.	11.	8.	14.
19	46.	40.	11.	3.	35.	4.	101.	123.	78.	126.
20	16.	31.	17.	6.	8.	12.	16.	12.	19.	38.
21	44.	14.	4.	4.	1.	11.	13.	14.	19.	9.
22	96.	514.	197.	59.	948.	131.	124.	516.	158.	1071.
23	23.	487.	54.	179.	76.	75.	100.	95.	464.	1590.
24	25.	33.	20.	18.	11.	11.	53.	32.	16.	40.
25	9.	8.	6.	4.	1.	9.	20.	23.	4.	15.
26	59.	77.	27.	47.	58.	55.	51.	58.	3.	61.
27	8.	17.	7.	18.	5.	13.	7.	9.	14.	22.
28	42.	2.	77.	9.	13.	15.	34.	5.	19.	42.
29	6.	40.	0.	2.	29.	5.	24.	26.	13.	15.
30	9.	24.	17.	24.	15.	29.	26.	36.	1.	6.
31	0.	35.	9.	16.	14.	10.	7.	8.	11.	18.
32	21.	0.	20.	1.	4.	10.	25.	34.	17.	66.
33	14.	262.	0.	0.	24.	8.	11.	12.	16.	28.
34	31.	83.	72.	0.	21.	20.	23.	27.	22.	23.
35	24.	11.	3.	13.	0.	37.	63.	104.	65.	4.
36	10.	88.	13.	35.	3.	0.	16.	11.	40.	28.
37	16.	50.	18.	30.	45.	14.	0.	57.	1.	7.
38	16.	71.	37.	46.	21.	26.	11.	0.	12.	10.
39	3.	40.	3.	11.	20.	34.	20.	27.	0.	17.
40	8.	53.	21.	31.	24.	11.	30.	25.	38.	0.
41	31.	45.	11.	38.	43.	37.	10.	32.	8.	13.
42	16.	21.	11.	7.	40.	6.	5.	20.	11.	8.
43	11.	45.	16.	24.	15.	11.	22.	21.	25.	147.
44	45.	30.	8.	15.	31.	37.	139.	40.	61.	76.
45	10.	71.	23.	39.	15.	4.	7.	5.	13.	52.
46	9.	27.	10.	12.	10.	6.	8.	8.	11.	48.
47	31.	52.	41.	59.	17.	23.	43.	9.	32.	29.
48	24.	28.	15.	21.	12.	34.	13.	15.	18.	55.
49	13.	76.	22.	49.	32.	17.	12.	13.	18.	33.
50	28.	42.	27.	42.	33.	21.	5.	4.	13.	38.
51	103.	122.	91.	89.	93.	110.	126.	157.	105.	191.
52	13.	47.	22.	24.	38.	50.	12.	99.	17.	12.

MATRIX ': % DIFFERENCE IN MULTIPLIERS: BEA/MRIO

COLUMN / ROW	31	32	33	34	35	36	37	38	39	40
53	9.	90.	34.	54.	84.	41.	7.	23.	14.	18.
54	12.	37.	18.	22.	21.	23.	28.	35.	24.	104.
55	17.	80.	24.	44.	40.	8.	34.	60.	43.	81.
56	24.	161.	48.	51.	54.	42.	61.	134.	137.	180.
57	21.	243.	99.	117.	148.	87.	62.	282.	103.	122.
58	14.	37.	11.	19.	21.	15.	38.	142.	35.	99.
59	27.	39.	21.	34.	30.	37.	214.	411.	140.	272.
60	18.	337.	25.	69.	36.	24.	35.	40.	235.	361.
61	9.	26.	9.	15.	13.	10.	9.	11.	10.	209.
62	16.	66.	20.	47.	27.	27.	14.	51.	28.	11.
63	38.	50.	29.	45.	29.	30.	29.	35.	21.	28.
64	24.	37.	28.	4.	8.	12.	8.	13.	14.	29.
65	4.	19.	6.	10.	8.	5.	4.	8.	6.	15.
66	15.	21.	10.	11.	12.	9.	8.	11.	12.	14.
67	3092.	2748.	1370.	2243.	2707.	2028.	2058.	2093.	2643.	1890.
68	9.	23.	9.	15.	5.	7.	6.	6.	9.	19.
69	7.	15.	4.	7.	6.	8.	6.	7.	7.	14.
70	7.	21.	7.	9.	9.	9.	6.	9.	8.	16.
71	6.	27.	9.	13.	15.	16.	12.	13.	12.	16.
72	13.	14.	8.	10.	9.	10.	11.	14.	11.	8.
73	8.	16.	7.	8.	8.	9.	9.	12.	9.	17.
74	9.	21.	7.	10.	10.	6.	10.	15.	11.	18.
75	415.	277.	342.	298.	261.	246.	282.	247.	275.	212.
76	15.	19.	7.	10.	12.	10.	10.	13.	13.	16.
77	13.	21.	10.	7.	11.	12.	12.	14.	12.	19.
78	8.	19.	4.	11.	8.	8.	5.	8.	9.	18.

MATRIX ·: % DIFFERENCE IN MULTIPLIERS: BEA/MRIO

COLUMN	41	42	43	44	45	46	47	48	49	50
ROW										
1	56.	45.	58.	29.	50.	58.	52.	52.	73.	39.
2	63.	52.	61.	38.	54.	54.	59.	58.	74.	42.
3	14.	49.	61.	29.	46.	68.	61.	27.	42.	39.
4	59.	64.	61.	41.	56.	64.	66.	64.	71.	55.
5	18.	60.	20.	11.	13.	24.	30.	25.	24.	17.
6	18.	45.	20.	30.	41.	42.	67.	40.	32.	21.
7	20.	54.	20.	13.	16.	28.	35.	29.	27.	22.
8	34.	70.	32.	28.	33.	42.	38.	28.	32.	32.
9	27.	35.	23.	22.	28.	47.	65.	39.	36.	36.
10	35.	36.	42.	30.	34.	48.	63.	48.	53.	41.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	32.	48.	38.	28.	32.	39.	38.	29.	39.	24.
13	1505.	265.	2199.	296.	211.	255.	162.	606.	223.	103.
14	28.	29.	34.	16.	27.	34.	28.	26.	35.	21.
15	19.	20.	27.	14.	18.	25.	19.	18.	22.	13.
16	68.	48.	74.	47.	57.	29.	106.	43.	83.	36.
17	76.	10.	109.	41.	51.	47.	189.	54.	117.	68.
18	13.	19.	24.	13.	18.	28.	18.	17.	21.	10.
19	435.	88.	233.	109.	344.	360.	299.	178.	353.	139.
20	10.	33.	59.	25.	42.	67.	57.	20.	36.	36.
21	13.	16.	21.	10.	17.	95.	48.	26.	34.	10.
22	1070.	818.	6881.	1250.	1040.	665.	644.	1264.	1541.	702.
23	1331.	1556.	6050.	3.	1849.	2294.	447.	685.	1395.	1067.
24	26.	47.	58.	53.	59.	71.	78.	67.	59.	54.
25	8.	11.	20.	15.	27.	42.	47.	40.	33.	16.
26	76.	75.	77.	60.	60.	64.	67.	58.	68.	59.
27	22.	24.	38.	23.	30.	40.	56.	38.	43.	34.
28	18.	39.	65.	23.	27.	24.	134.	46.	83.	58.
29	16.	23.	31.	17.	28.	39.	32.	16.	34.	18.
30	13.	8.	61.	9.	21.	26.	74.	45.	70.	61.
31	19.	37.	20.	15.	21.	26.	25.	16.	20.	21.
32	20.	19.	63.	9.	14.	12.	66.	24.	64.	37.
33	55.	29.	72.	1.	89.	78.	68.	6.	12.	28.
34	49.	3.	40.	41.	35.	62.	80.	38.	51.	30.
35	151.	40.	228.	82.	156.	240.	191.	126.	185.	250.
36	18.	11.	11.	13.	20.	53.	17.	28.	16.	11.
37	8.	19.	15.	7.	10.	21.	20.	16.	17.	11.
38	11.	21.	16.	21.	29.	35.	41.	25.	23.	14.
39	29.	28.	51.	22.	35.	42.	62.	44.	62.	54.
40	107.	170.	53.	58.	6.	23.	8.	3.	12.	105.
41	0.	22.	12.	6.	24.	26.	28.	24.	47.	22.
42	24.	0.	28.	15.	16.	36.	51.	17.	22.	11.
43	188.	132.	0.	1.	6.	34.	126.	14.	52.	98.
44	334.	91.	791.	-0.	1504.	313.	252.	310.	152.	55.
45	27.	76.	126.	92.	-0.	477.	75.	175.	113.	33.
46	24.	68.	2.	28.	133.	-0.	15.	113.	133.	20.
47	23.	20.	11.	8.	7.	26.	0.	15.	17.	5.
48	19.	85.	144.	83.	94.	303.	176.	-0.	347.	90.
49	93.	95.	13.	2.	8.	12.	5.	7.	0.	46.
50	52.	81.	13.	3.	33.	7.	112.	36.	129.	0.
51	199.	627.	417.	272.	895.	368.	3063.	2304.	1790.	283.
52	136.	217.	131.	85.	125.	314.	258.	139.	428.	85.

MATRIX : % DIFFERENCE IN MULTIPLIERS: BEA/MRIO

COLUMN / ROW	41	42	43	44	45	46	47	48	49	50
53	54.	47.	18.	21.	13.	8.	7.	8.	17.	55.
54	59.	101.	191.	8.	121.	79.	192.	151.	203.	51.
55	84.	113.	142.	8.	143.	101.	145.	120.	90.	135.
56	344.	249.	1591.	253.	259.	158.	152.	199.	340.	218.
57	502.	147.	905.	267.	176.	140.	197.	186.	98.	493.
58	232.	162.	5.	3.	48.	28.	165.	131.	182.	4.
59	1943.	600.	188.	52.	400.	1377.	1319.	569.	1422.	512.
60	355.	535.	3685.	264.	568.	252.	104.	323.	755.	683.
61	25.	79.	510.	87.	203.	86.	62.	197.	163.	131.
62	144.	186.	36.	20.	87.	111.	128.	26.	18.	234.
63	50.	55.	85.	29.	49.	51.	49.	55.	52.	47.
64	45.	25.	38.	52.	31.	44.	64.	42.	49.	30.
65	18.	32.	23.	12.	18.	25.	31.	23.	27.	17.
66	17.	27.	27.	15.	19.	23.	22.	19.	22.	17.
67	2152.	2276.	2073.	2404.	1797.	1778.	1854.	1613.	1836.	1783.
68	19.	32.	26.	16.	20.	33.	30.	27.	26.	18.
69	19.	24.	20.	10.	16.	22.	22.	16.	23.	16.
70	16.	25.	28.	12.	14.	25.	23.	18.	26.	13.
71	19.	28.	40.	20.	24.	27.	28.	11.	31.	15.
72	20.	23.	29.	12.	18.	25.	18.	19.	24.	15.
73	20.	24.	26.	11.	22.	26.	26.	22.	26.	17.
74	36.	32.	30.	18.	31.	34.	35.	24.	35.	21.
75	269.	246.	253.	274.	225.	248.	212.	210.	237.	188.
76	19.	25.	27.	14.	18.	22.	20.	17.	21.	15.
77	22.	28.	29.	14.	21.	25.	25.	20.	25.	18.
78	19.	30.	19.	14.	18.	30.	33.	25.	26.	22.

MATRIX : % DIFFERENCE IN MULTIPLIERS: BEA/MRIO

COLUMN	51	52	53	54	55	56	57	58	59	60
ROW										
1	28.	85.	42.	49.	36.	37.	43.	51.	36.	29.
2	33.	84.	46.	43.	40.	38.	46.	51.	47.	30.
3	48.	46.	43.	31.	35.	24.	42.	46.	30.	41.
4	47.	75.	55.	51.	46.	46.	54.	54.	45.	42.
5	41.	41.	21.	23.	25.	47.	64.	40.	8.	23.
6	20.	34.	22.	21.	23.	37.	26.	11.	18.	14.
7	36.	43.	23.	24.	31.	37.	45.	34.	11.	25.
8	36.	57.	33.	50.	25.	40.	57.	60.	27.	25.
9	124.	41.	21.	22.	32.	38.	26.	27.	17.	34.
10	45.	52.	33.	35.	34.	43.	27.	25.	29.	64.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	21.	49.	33.	40.	34.	31.	35.	44.	21.	26.
13	318.	354.	1221.	230.	158.	12.	751.	601.	213.	639.
14	13.	48.	24.	29.	20.	19.	24.	29.	21.	15.
15	8.	35.	17.	22.	13.	13.	17.	20.	14.	10.
16	43.	68.	46.	20.	32.	26.	50.	38.	24.	26.
17	25.	30.	30.	20.	10.	24.	45.	32.	6.	38.
18	12.	32.	18.	21.	13.	13.	16.	21.	14.	11.
19	140.	318.	139.	158.	106.	68.	63.	335.	1.	86.
20	51.	37.	40.	25.	28.	19.	41.	48.	22.	39.
21	12.	8.	25.	5.	14.	12.	23.	25.	10.	16.
22	2733.	815.	1229.	307.	1122.	1.	4478.	5875.	67.	48.
23	3024.	1584.	988.	1424.	227.	1114.	665.	343.	23.	-0.
24	37.	56.	26.	40.	25.	35.	22.	42.	49.	58.
25	22.	32.	27.	7.	5.	17.	19.	13.	16.	26.
26	52.	90.	38.	73.	72.	32.	75.	84.	64.	53.
27	27.	40.	23.	22.	20.	28.	17.	14.	20.	35.
28	19.	45.	22.	10.	8.	15.	19.	13.	15.	28.
29	22.	64.	29.	43.	26.	22.	31.	40.	23.	17.
30	25.	26.	17.	8.	9.	28.	39.	98.	4.	16.
31	20.	36.	17.	28.	11.	23.	33.	31.	12.	14.
32	9.	33.	23.	4.	7.	14.	16.	9.	4.	21.
33	54.	78.	44.	39.	46.	48.	63.	58.	37.	26.
34	19.	103.	49.	4.	29.	33.	42.	58.	21.	17.
35	17.	74.	56.	25.	2.	8.	4.	109.	2.	36.
36	69.	26.	11.	9.	12.	32.	16.	14.	11.	14.
37	25.	35.	16.	18.	16.	34.	48.	36.	5.	15.
38	15.	26.	13.	17.	11.	24.	21.	7.	12.	9.
39	33.	47.	37.	27.	24.	40.	39.	45.	18.	32.
40	35.	56.	21.	85.	101.	66.	104.	87.	34.	55.
41	8.	20.	23.	8.	7.	7.	12.	40.	2.	8.
42	12.	21.	18.	9.	12.	12.	23.	33.	4.	9.
43	75.	45.	44.	146.	64.	65.	106.	108.	12.	91.
44	57.	105.	119.	236.	45.	36.	51.	63.	96.	36.
45	60.	52.	45.	31.	35.	46.	43.	30.	31.	41.
46	36.	101.	37.	75.	26.	36.	81.	30.	28.	46.
47	10.	38.	16.	18.	13.	13.	24.	20.	4.	4.
48	65.	110.	50.	51.	39.	60.	45.	106.	41.	86.
49	16.	25.	19.	37.	47.	63.	172.	10.	9.	11.
50	84.	112.	57.	54.	43.	34.	95.	71.	4.	1.
51	-0.	1252.	312.	1414.	216.	5.	428.	391.	301.	105.
52	207.	0.	560.	-0.	190.	115.	205.	712.	3.	55.

MATRIX . : % DIFFERENCE IN MULTIPLIERS: BEA/MRIO

COLUMN	51	52	53	54	55	56	57	58	59	60
ROW										
53	9.	8.	0.	11.	9.	11.	185.	23.	21.	27.
54	29.	1388.	329.	-0.	75.	62.	95.	221.	62.	35.
55	4.	28.	12.	7.	0.	7.	40.	12.	4.	25.
56	262.	315.	111.	283.	190.	0.	380.	984.	8.	5.
57	5.	94.	21.	206.	219.	1.	1.	144.	35.	21.
58	70.	4.	35.	66.	0.	26.	272.	0.	3.	11.
59	569.	1857.	560.	932.	595.	161.	176.	683.	0.	270.
60	339.	957.	646.	647.	88.	306.	507.	136.	160.	0.
61	32.	83.	274.	87.	30.	35.	36.	43.	25.	57.
62	118.	21.	119.	2.	127.	132.	195.	185.	5.	3.
63	36.	72.	63.	48.	43.	55.	65.	119.	25.	7.
64	20.	55.	50.	2.	36.	34.	37.	39.	24.	27.
65	18.	36.	20.	20.	17.	19.	26.	23.	8.	15.
66	10.	32.	20.	27.	19.	14.	22.	27.	14.	10.
67	1686.	2344.	1692.	4443.	2394.	1739.	1812.	2201.	2658.	1452.
68	22.	39.	21.	23.	21.	23.	24.	23.	13.	16.
69	13.	25.	19.	16.	12.	12.	19.	17.	8.	13.
70	11.	36.	17.	26.	22.	18.	25.	27.	11.	15.
71	12.	39.	22.	29.	20.	16.	26.	31.	18.	19.
72	10.	43.	18.	25.	15.	16.	17.	21.	13.	6.
73	12.	49.	28.	10.	15.	13.	24.	30.	11.	11.
74	19.	47.	24.	31.	22.	15.	24.	43.	2.	13.
75	154.	292.	187.	397.	210.	222.	192.	205.	277.	196.
76	11.	30.	18.	28.	18.	12.	20.	26.	15.	9.
77	13.	40.	26.	18.	20.	15.	25.	32.	12.	14.
78	15.	36.	21.	20.	18.	18.	24.	20.	11.	14.

MATRIX ': % DIFFERENCE IN MULTIPLIERS: BEA/MRIO

COLUMN / ROW	61	62	63	64	65	66	67	68	69	70
1	35.	27.	42.	43.	32.	28.	14.	76.	174.	33.
2	42.	17.	41.	22.	35.	33.	20.	91.	172.	40.
3	4.	60.	23.	6.	23.	12.	27.	80.	98.	28.
4	37.	33.	48.	32.	97.	56.	44.	140.	15.	78.
5	12.	33.	30.	23.	15.	30.	44.	149.	176.	57.
6	14.	18.	12.	10.	26.	22.	38.	107.	189.	56.
7	14.	38.	16.	22.	51.	16.	24.	10.	48.	20.
8	27.	51.	93.	46.	5.	7.	22.	5.	17.	18.
9	18.	40.	30.	23.	19.	7.	26.	80.	70.	29.
10	30.	55.	12.	40.	42.	42.	35.	153.	133.	56.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	24.	36.	29.	25.	16.	2.	10.	73.	21.	17.
13	178.	1192.	995.	81.	82.	12.	8.	56.	67.	14.
14	17.	16.	20.	23.	8.	9.	5.	39.	53.	11.
15	10.	16.	12.	12.	9.	4.	2.	28.	12.	5.
16	21.	6.	29.	8.	27.	24.	54.	98.	225.	51.
17	4.	39.	30.	9.	10.	24.	47.	92.	86.	47.
18	9.	18.	14.	9.	8.	4.	22.	25.	123.	32.
19	4.	164.	38.	73.	23.	22.	28.	201.	83.	38.
20	2.	59.	25.	5.	21.	10.	41.	77.	54.	28.
21	21.	20.	65.	12.	40.	24.	29.	88.	11.	46.
22	1.	6604.	1957.	2.	20.	2.	9.	138.	242.	37.
23	3.	1323.	477.	572.	9.	23.	48.	82.	288.	74.
24	34.	52.	12.	16.	49.	33.	90.	141.	31.	24.
25	21.	21.	14.	6.	18.	23.	34.	87.	12.	32.
26	54.	73.	72.	82.	26.	18.	33.	98.	49.	10.
27	21.	41.	7.	19.	28.	27.	22.	85.	86.	44.
28	12.	32.	15.	7.	15.	16.	40.	86.	67.	38.
29	20.	72.	36.	37.	15.	11.	9.	81.	27.	9.
30	6.	35.	59.	4.	15.	4.	16.	72.	36.	22.
31	14.	30.	28.	17.	2.	3.	12.	26.	8.	11.
32	9.	15.	13.	5.	5.	7.	21.	56.	28.	24.
33	37.	20.	10.	17.	42.	32.	13.	101.	137.	38.
34	23.	7.	2.	4.	19.	11.	3.	48.	20.	16.
35	7.	27.	8.	7.	13.	8.	14.	70.	47.	22.
36	9.	28.	21.	13.	19.	8.	22.	90.	52.	29.
37	6.	26.	28.	16.	9.	19.	34.	84.	142.	41.
38	10.	15.	10.	7.	17.	14.	30.	76.	149.	42.
39	19.	10.	29.	32.	13.	12.	15.	66.	115.	25.
40	1.	120.	48.	81.	14.	3.	13.	67.	38.	18.
41	16.	19.	35.	8.	13.	11.	26.	80.	65.	35.
42	6.	21.	21.	9.	8.	12.	28.	69.	55.	30.
43	3.	103.	36.	74.	3.	12.	10.	22.	38.	9.
44	378.	34.	29.	58.	53.	18.	13.	61.	37.	11.
45	8.	42.	31.	31.	23.	8.	21.	21.	61.	21.
46	17.	38.	24.	30.	16.	5.	21.	74.	60.	25.
47	15.	19.	111.	71.	9.	18.	33.	60.	122.	37.
48	40.	69.	18.	32.	52.	55.	74.	136.	154.	59.
49	4.	40.	75.	103.	12.	25.	47.	54.	160.	41.
50	15.	128.	26.	45.	8.	14.	30.	56.	78.	31.
51	681.	322.	128.	107.	95.	37.	68.	133.	141.	51.
52	9.	324.	226.	42.	16.	6.	9.	68.	32.	8.

MATRIX : % DIFFERENCE IN MULTIPLIERS: BEA/MRIO

COLUMN / ROW	61	62	63	64	65	66	67	68	69	70
53	3.	24.	25.	18.	11.	13.	19.	42.	80.	20.
54	1.	65.	114.	66.	14.	5.	7.	68.	23.	14.
55	9.	16.	25.	11.	20.	7.	21.	53.	23.	31.
56	86.	1390.	364.	80.	16.	0.	2.	57.	49.	13.
57	89.	74.	139.	16.	12.	3.	14.	64.	128.	55.
58	20.	69.	111.	49.	2.	4.	12.	50.	12.	11.
59	33.	785.	112.	145.	5.	6.	23.	70.	19.	19.
60	542.	402.	555.	264.	1.	100.	39.	42.	218.	40.
61	-0.	165.	22.	93.	1.	15.	12.	58.	37.	17.
62	26.	-0.	328.	72.	16.	17.	25.	74.	121.	19.
63	35.	12.	0.	22.	25.	13.	3.	72.	38.	12.
64	22.	19.	43.	-0.	16.	6.	5.	63.	24.	5.
65	10.	26.	16.	13.	0.	7.	7.	24.	20.	11.
66	14.	19.	13.	13.	5.	0.	1.	35.	7.	3.
67	2070.	2819.	2510.	2821.	1216.	1313.	0.	3286.	2690.	547.
68	15.	29.	20.	18.	30.	4.	6.	2.	10.	7.
69	9.	20.	12.	8.	5.	4.	6.	40.	0.	9.
70	12.	21.	16.	14.	5.	3.	4.	32.	6.	0.
71	16.	25.	18.	16.	6.	4.	3.	23.	5.	4.
72	11.	17.	11.	12.	8.	4.	3.	36.	7.	8.
73	13.	15.	12.	10.	9.	4.	3.	35.	6.	3.
74	15.	29.	16.	14.	1.	1.	7.	29.	4.	6.
75	189.	262.	261.	280.	286.	122.	0.	422.	107.	372.
76	14.	22.	14.	15.	6.	3.	4.	48.	10.	1.
77	14.	21.	15.	13.	7.	2.	7.	16.	6.	2.
78	12.	22.	14.	16.	2.	2.	5.	30.	5.	5.

MATRIX ': % DIFFERENCE IN MULTIPLIERS: UN/MRIO

COLUMN	11	12	13	14	15	16	17	18	19	20
ROW										
53	8.	10.	25.	20.	25.	37.	40.	31.	59.	21.
54	0.	1.	37.	5.	4.	9.	17.	8.	42.	13.
55	1.	2.	11.	-3.	-8.	8.	16.	14.	35.	24.
56	-5.	-3.	42.	7.	9.	5.	12.	4.	32.	2.
57	-17.	-9.	34.	7.	8.	7.	13.	8.	19.	-5.
58	11.	9.	39.	14.	16.	19.	24.	16.	47.	19.
59	-11.	-6.	-321.	7.	8.	12.	14.	7.	10.	-6.
60	-40.	-33.	42.	3.	-6.	-4.	3.	-6.	17.	3.
61	10.	10.	33.	6.	4.	13.	19.	15.	45.	22.
62	5.	4.	36.	6.	6.	7.	10.	5.	33.	7.
63	29.	26.	43.	32.	32.	22.	29.	17.	55.	23.
64	8.	4.	49.	12.	17.	-18.	15.	3.	39.	14.
65	6.	5.	41.	8.	10.	11.	17.	11.	43.	9.
66	10.	6.	42.	10.	16.	10.	18.	6.	40.	9.
67	30.	27.	73.	36.	38.	35.	46.	30.	73.	35.
68	14.	11.	47.	13.	18.	18.	23.	15.	48.	12.
69	3.	2.	39.	8.	8.	5.	14.	5.	30.	10.
70	7.	5.	41.	7.	7.	8.	16.	6.	40.	9.
71	12.	9.	43.	13.	13.	13.	18.	8.	41.	10.
72	11.	7.	41.	6.	5.	6.	15.	6.	39.	11.
73	5.	7.	41.	7.	6.	11.	17.	8.	41.	8.
74	6.	4.	40.	9.	13.	14.	19.	9.	41.	10.
75	12.	9.	45.	15.	10.	12.	20.	8.	40.	12.
76	8.	5.	43.	13.	15.	12.	20.	8.	43.	11.
77	22.	16.	49.	14.	12.	13.	21.	8.	44.	16.
78	6.	4.	42.	7.	17.	12.	19.	11.	42.	10.

MATRIX · : % DIFFERENCE IN MULTIPLIERS: BEA/MRIO

COLUMN / ROW	71	72	73	74	75	76	77	78
53	65.	10.	13.	13.	23.	24.	14.	10.
54	14.	0.	73.	36.	8.	6.	4.	3.
55	15.	10.	93.	8.	17.	14.	11.	3.
56	65.	55.	122.	27.	19.	22.	17.	19.
57	346.	2.	228.	75.	49.	33.	23.	55.
58	86.	11.	13.	0.	14.	9.	4.	6.
59	177.	17.	55.	1.	23.	17.	4.	14.
60	242.	78.	114.	122.	44.	43.	4.	35.
61	149.	5.	21.	31.	16.	17.	2.	4.
62	27.	17.	54.	18.	26.	1.	14.	7.
63	135.	2.	48.	35.	1.	4.	20.	25.
64	50.	1.	41.	24.	2.	4.	11.	9.
65	61.	8.	59.	10.	9.	7.	1.	7.
66	52.	5.	59.	6.	6.	3.	8.	8.
67	2827.	908.	38407.	1690.	1276.	2.	3156.	1900.
68	85.	7.	39.	19.	8.	4.	7.	2.
69	37.	5.	53.	2.	6.	5.	6.	6.
70	19.	4.	66.	5.	5.	7.	6.	4.
71	1.	3.	49.	5.	2.	2.	4.	11.
72	81.	0.	49.	7.	3.	2.	3.	12.
73	34.	5.	2.	10.	4.	5.	4.	5.
74	56.	2.	24.	0.	5.	3.	2.	5.
75	1036.	147.	3103.	189.	0.	42.	175.	469.
76	66.	3.	45.	9.	3.	0.	9.	5.
77	22.	6.	17.	10.	8.	3.	0.	9.
78	46.	3.	36.	5.	6.	2.	2.	0.

MATRIX : % DIFFERENCE IN MULTIPLIERS: UN/MRIO

COLUMN	1	2	3	4	5	6	7	8	9	10
ROW										
1	2.	9.	41.	49.	17.	11.	13.	10.	18.	-177.
2	9.	1.	39.	59.	19.	14.	15.	12.	18.	-209.
3	-53.	-176.	0.	44.	15.	13.	10.	13.	13.	-477.
4	13.	11.	16.	0.	18.	18.	16.	14.	18.	-155.
5	26.	30.	41.	86.	0.	-12.	17.	22.	26.	-129.
6	34.	33.	45.	100.	0.	1.	21.	26.	25.	-717.
7	20.	29.	42.	79.	6.	12.	0.	-35.	11.	-50.
8	25.	22.	30.	76.	14.	15.	15.	-2.	-4.	10.
9	14.	10.	36.	69.	4.	2.	11.	-1.	-0.	-6.
10	33.	26.	45.	95.	15.	24.	28.	37.	29.	1.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	-14.	-10.	32.	43.	11.	9.	6.	5.	15.	8.
13	-29.	-8.	-142.	23.	-65.	-16.	-75.	-23.	-26.	-362.
14	5.	6.	-21.	51.	14.	10.	10.	6.	15.	-230.
15	13.	16.	21.	52.	14.	9.	8.	6.	15.	-51.
16	26.	21.	28.	58.	18.	13.	14.	13.	17.	-32.
17	8.	-5.	18.	48.	15.	13.	14.	10.	21.	-43.
18	-0.	4.	31.	63.	13.	14.	14.	4.	8.	-127.
19	13.	14.	23.	57.	6.	-1.	-4.	10.	-32.	-666.
20	-26.	-62.	39.	62.	8.	7.	4.	7.	7.	-116.
21	17.	9.	59.	48.	15.	13.	12.	12.	14.	-237.
22	-19.	-28.	16.	-79.	-9.	-8.	-11.	-13.	-141.	-25.
23	-8.	-1.	-0.	-211.	-15.	-56.	-42.	-4.	-112.	19.
24	9.	13.	45.	57.	28.	19.	20.	9.	10.	-103.
25	3.	-7.	48.	47.	15.	12.	14.	-6.	12.	-315.
26	13.	28.	39.	63.	32.	24.	25.	20.	31.	-14.
27	20.	14.	41.	76.	8.	6.	7.	3.	17.	-276.
28	14.	14.	31.	61.	18.	14.	16.	16.	24.	-87.
29	8.	8.	29.	57.	15.	-5.	6.	-33.	-19.	48.
30	-9.	-7.	20.	66.	11.	10.	8.	5.	15.	-79.
31	15.	11.	20.	61.	6.	6.	5.	-27.	10.	-0.
32	10.	10.	28.	62.	5.	3.	2.	6.	13.	29.
33	17.	17.	36.	54.	2.	2.	-8.	-9.	-40.	-373.
34	13.	-2.	46.	49.	10.	9.	8.	7.	9.	-40.
35	-11.	-18.	29.	39.	2.	-6.	1.	5.	4.	-60.
36	8.	7.	32.	73.	6.	9.	8.	5.	-101.	-258.
37	12.	18.	33.	78.	8.	10.	10.	12.	21.	24.
38	23.	23.	41.	87.	13.	12.	17.	17.	25.	-53.
39	-10.	3.	17.	46.	19.	13.	15.	-42.	14.	-1023.
40	-15.	-9.	28.	28.	10.	7.	10.	5.	14.	29.
41	6.	13.	31.	67.	14.	12.	13.	13.	23.	34.
42	14.	-7.	31.	48.	10.	9.	6.	8.	11.	-77.
43	32.	33.	30.	69.	8.	6.	5.	9.	16.	49.
44	21.	13.	51.	76.	37.	21.	14.	29.	26.	-79.
45	17.	22.	37.	74.	3.	3.	2.	5.	12.	46.
46	1.	9.	29.	35.	-2.	4.	-8.	4.	14.	44.
47	21.	20.	31.	60.	15.	18.	13.	21.	33.	50.
48	25.	31.	32.	70.	21.	14.	8.	30.	19.	-1533.
49	26.	27.	26.	26.	21.	16.	16.	9.	19.	44.
50	21.	22.	27.	69.	13.	6.	6.	13.	19.	36.
51	41.	51.	32.	96.	40.	25.	24.	18.	37.	-19.
52	9.	17.	26.	34.	23.	10.	6.	7.	7.	-16.

MATRIX : % DIFFERENCE IN MULTIPLIERS: UN/MRIO

COLUMN / ROW	1	2	3	4	5	6	7	8	9	10
53	22.	27.	34.	57.	18.	12.	7.	6.	19.	40.
54	-7.	-4.	27.	48.	11.	8.	5.	3.	7.	-25.
55	-43.	-28.	17.	32.	9.	7.	2.	5.	8.	38.
56	7.	6.	-26.	42.	-1.	-7.	-28.	2.	-26.	-14.
57	10.	11.	-58.	29.	2.	-11.	-22.	6.	-12.	13.
58	15.	14.	27.	58.	14.	14.	15.	9.	22.	38.
59	10.	8.	15.	47.	-3.	-13.	-8.	-3.	7.	14.
60	2.	-23.	-12.	39.	-2.	-59.	-73.	-12.	-99.	20.
61	-14.	-15.	17.	51.	8.	5.	2.	3.	6.	24.
62	-1.	0.	17.	29.	7.	3.	-1.	6.	10.	-16.
63	34.	43.	39.	76.	37.	27.	26.	22.	32.	-25.
64	12.	16.	30.	66.	20.	9.	12.	9.	6.	-33.
65	8.	11.	22.	55.	4.	3.	6.	-1.	8.	12.
66	11.	13.	31.	64.	12.	10.	9.	6.	15.	-3.
67	33.	38.	63.	95.	31.	30.	27.	28.	40.	59.
68	17.	20.	35.	72.	7.	8.	7.	-15.	14.	9.
69	9.	10.	22.	54.	7.	6.	5.	3.	13.	-25.
70	4.	5.	27.	54.	7.	5.	4.	4.	12.	4.
71	13.	10.	36.	53.	4.	3.	4.	4.	11.	13.
72	5.	14.	22.	53.	13.	9.	8.	5.	14.	-71.
73	9.	11.	31.	62.	7.	6.	7.	1.	13.	-38.
74	11.	11.	20.	59.	9.	5.	4.	4.	12.	3.
75	38.	21.	23.	57.	16.	11.	11.	8.	16.	-32.
76	10.	14.	35.	61.	8.	7.	5.	6.	15.	31.
77	9.	17.	33.	64.	16.	12.	13.	9.	20.	16.
78	7.	14.	23.	60.	6.	5.	6.	3.	13.	22.

MATRIX : % DIFFERENCE IN MULTIPLIERS: UN/MRIO

COLUMN	11	12	13	14	15	16	17	18	19	20
ROW										
1	16.	14.	49.	6.	9.	8.	15.	10.	45.	38.
2	5.	16.	50.	9.	1.	9.	13.	11.	43.	33.
3	8.	8.	50.	0.	-37.	-15.	6.	2.	13.	8.
4	16.	18.	51.	17.	11.	19.	23.	20.	55.	24.
5	17.	17.	35.	22.	30.	39.	40.	37.	63.	15.
6	19.	19.	56.	27.	36.	41.	45.	39.	68.	29.
7	17.	17.	44.	17.	19.	22.	28.	23.	54.	17.
8	13.	11.	54.	22.	22.	26.	29.	23.	57.	21.
9	6.	2.	39.	14.	12.	20.	17.	18.	38.	13.
10	20.	21.	67.	26.	30.	42.	47.	43.	84.	32.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	15.	0.	46.	-0.	-3.	8.	15.	8.	43.	10.
13	-25.	-78.	1.	-30.	-3.	-4.	4.	-7.	25.	-42.
14	12.	9.	43.	1.	8.	8.	17.	8.	42.	21.
15	11.	7.	42.	11.	0.	11.	19.	8.	42.	13.
16	8.	11.	39.	23.	14.	1.	8.	3.	38.	12.
17	6.	13.	46.	14.	-2.	-13.	1.	-7.	38.	24.
18	7.	5.	38.	6.	11.	-176.	12.	0.	18.	8.
19	4.	2.	-52.	10.	13.	-585.	7.	-12.	3.	20.
20	2.	2.	45.	5.	0.	-2.	5.	9.	19.	2.
21	10.	11.	43.	10.	5.	18.	22.	18.	49.	-45.
22	-0.	-25.	8.	-16.	-15.	-3.	6.	15.	-180.	-235.
23	-0.	-3.	19.	-13.	-21.	-16.	-734.	-46.	-441.	-397.
24	12.	11.	46.	13.	18.	15.	19.	16.	38.	11.
25	11.	11.	36.	5.	1.	1.	11.	4.	36.	10.
26	32.	25.	52.	17.	14.	23.	30.	21.	58.	26.
27	13.	12.	51.	18.	19.	23.	33.	25.	63.	13.
28	11.	12.	52.	13.	1.	5.	10.	5.	40.	13.
29	14.	8.	44.	6.	6.	8.	13.	7.	41.	-7.
30	5.	0.	9.	6.	6.	11.	13.	13.	35.	8.
31	5.	3.	41.	13.	12.	17.	20.	14.	46.	13.
32	4.	5.	43.	8.	14.	-46.	3.	-13.	36.	2.
33	3.	0.	19.	9.	12.	14.	12.	-4.	-63.	3.
34	11.	10.	35.	12.	7.	8.	19.	-9.	20.	21.
35	6.	2.	33.	3.	-3.	7.	-3.	9.	35.	3.
36	1.	2.	25.	11.	11.	17.	16.	15.	34.	9.
37	9.	10.	28.	13.	19.	28.	25.	24.	35.	9.
38	11.	11.	43.	19.	27.	30.	34.	28.	42.	21.
39	14.	11.	44.	3.	3.	20.	23.	20.	54.	21.
40	0.	0.	-45.	-1.	-3.	17.	21.	14.	43.	10.
41	8.	10.	15.	6.	17.	15.	14.	16.	18.	8.
42	5.	4.	31.	9.	2.	11.	14.	11.	30.	9.
43	15.	19.	-130.	26.	28.	39.	43.	34.	71.	25.
44	30.	25.	75.	22.	14.	23.	30.	26.	63.	40.
45	4.	3.	47.	20.	22.	36.	41.	33.	67.	20.
46	3.	3.	29.	10.	10.	15.	20.	12.	46.	9.
47	8.	12.	28.	14.	19.	29.	25.	22.	24.	12.
48	6.	10.	-10.	15.	35.	13.	16.	14.	48.	10.
49	5.	7.	27.	20.	24.	32.	31.	26.	49.	13.
50	12.	13.	29.	19.	23.	25.	21.	20.	41.	12.
51	3.	7.	5.	26.	29.	46.	53.	36.	85.	37.
52	3.	3.	-5.	15.	20.	30.	37.	27.	64.	15.

MATRIX ': % DIFFERENCE IN MULTIPLIERS: BEA/MRIO

COLUMN	71	72	73	74	75	76	77	78
ROW								
1	1298.	29.	68.	60.	15.	16.	24.	45.
2	859.	31.	75.	61.	27.	19.	30.	41.
3	34.	19.	266.	42.	22.	17.	19.	7.
4	680.	53.	123.	39.	57.	45.	64.	32.
5	75.	37.	112.	19.	34.	37.	23.	18.
6	74.	25.	126.	24.	27.	35.	32.	19.
7	127.	20.	87.	36.	29.	13.	1.	3.
8	204.	15.	69.	15.	31.	15.	9.	6.
9	20.	12.	160.	13.	19.	14.	16.	5.
10	150.	30.	202.	38.	19.	38.	39.	10.
11	0.	0.	0.	0.	0.	0.	0.	0.
12	5.	8.	77.	41.	6.	6.	9.	2.
13	123.	13.	54.	103.	15.	21.	10.	41.
14	279.	10.	45.	21.	8.	4.	7.	18.
15	81.	4.	31.	9.	3.	3.	3.	11.
16	324.	10.	234.	26.	47.	30.	16.	35.
17	155.	9.	316.	10.	39.	24.	6.	24.
18	135.	2.	141.	10.	25.	15.	17.	10.
19	393.	1.	131.	4.	32.	5.	2.	10.
20	18.	18.	389.	35.	25.	16.	18.	6.
21	472.	21.	88.	14.	39.	25.	32.	23.
22	263.	57.	210.	213.	37.	102.	38.	53.
23	21.	57.	118.	79.	36.	36.	10.	6.
24	154.	25.	604.	42.	62.	22.	27.	35.
25	148.	8.	209.	13.	29.	14.	18.	23.
26	122.	39.	222.	51.	17.	5.	16.	43.
27	80.	15.	165.	22.	11.	19.	24.	9.
28	67.	15.	278.	9.	32.	22.	14.	17.
29	199.	1.	11.	22.	14.	0.	3.	11.
30	7.	8.	96.	3.	10.	8.	11.	3.
31	68.	5.	53.	5.	12.	7.	4.	5.
32	46.	5.	144.	2.	20.	8.	5.	10.
33	391.	1.	144.	60.	9.	25.	19.	39.
34	232.	0.	96.	19.	2.	7.	5.	24.
35	37.	7.	73.	2.	13.	7.	11.	6.
36	19.	4.	60.	3.	17.	13.	13.	4.
37	52.	26.	80.	11.	31.	25.	14.	11.
38	47.	18.	99.	15.	23.	25.	22.	13.
39	84.	13.	75.	16.	17.	8.	14.	10.
40	6.	13.	76.	45.	8.	7.	10.	3.
41	93.	14.	78.	2.	30.	18.	9.	17.
42	41.	7.	122.	5.	24.	17.	12.	8.
43	121.	22.	4.	3.	15.	18.	4.	9.
44	511.	28.	2.	48.	22.	28.	24.	17.
45	24.	19.	21.	31.	20.	15.	4.	4.
46	10.	20.	147.	30.	14.	11.	13.	4.
47	144.	27.	28.	9.	43.	32.	14.	19.
48	210.	37.	538.	52.	38.	39.	47.	26.
49	78.	48.	60.	18.	45.	35.	18.	14.
50	136.	25.	43.	2.	28.	26.	10.	15.
51	447.	111.	68.	141.	81.	79.	74.	78.
52	17.	10.	3.	13.	10.	11.	7.	4.

MATRIX : % DIFFERENCE IN MULTIPLIERS: UN/MRIO

COLUMN / ROW	21	22	23	24	25	26	27	28	29	30
1	19.	18.	25.	12.	14.	9.	-0.	-1.	-0.	15.
2	18.	17.	20.	12.	14.	12.	11.	1.	5.	18.
3	6.	10.	20.	13.	15.	105.	29.	34.	12.	18.
4	21.	25.	30.	24.	23.	45.	22.	19.	8.	23.
5	31.	17.	23.	18.	22.	67.	31.	38.	20.	24.
6	14.	24.	21.	19.	24.	71.	32.	38.	11.	28.
7	29.	19.	23.	10.	14.	64.	30.	31.	22.	25.
8	28.	21.	26.	19.	20.	20.	22.	32.	9.	4.
9	19.	5.	20.	7.	10.	85.	23.	25.	15.	12.
10	24.	40.	35.	17.	25.	127.	32.	39.	10.	31.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	16.	13.	17.	13.	12.	44.	28.	26.	10.	13.
13	-26.	-23.	-379.	-11.	-12.	-83.	59.	33.	8.	5.
14	17.	14.	18.	9.	12.	5.	15.	21.	12.	12.
15	19.	11.	15.	10.	12.	-48.	23.	26.	24.	13.
16	10.	8.	5.	-4.	-4.	65.	35.	-185.	15.	-3.
17	15.	6.	14.	-8.	-15.	83.	28.	-554.	24.	-31.
18	17.	5.	14.	6.	7.	53.	22.	13.	14.	13.
19	14.	-48.	11.	-128.	-74.	-13.	31.	-6.	0.	20.
20	16.	7.	14.	8.	11.	101.	25.	28.	20.	17.
21	1.	-3.	11.	2.	-0.	0.	19.	22.	11.	13.
22	-254.	0.	2.	-72.	-64.	-241.	-53.	-30.	-63.	-18.
23	-412.	-5924.	0.	-71.	-351.	-95.	-178.	-28.	-79.	-41.
24	-30.	16.	-10.	1.	6.	97.	9.	25.	24.	18.
25	9.	6.	13.	7.	0.	86.	11.	15.	15.	10.
26	32.	26.	-63.	-19.	-25.	10.	18.	35.	37.	25.
27	12.	24.	25.	10.	11.	90.	4.	27.	13.	14.
28	-3.	15.	24.	3.	3.	86.	-7.	-1.	23.	10.
29	13.	10.	20.	7.	11.	-416.	-119.	3.	1.	2.
30	5.	6.	12.	9.	8.	61.	27.	26.	16.	0.
31	18.	14.	18.	10.	10.	22.	24.	27.	15.	11.
32	-3.	6.	12.	4.	4.	69.	-20.	-75.	15.	-4.
33	14.	4.	10.	6.	1.	4.	27.	38.	-3.	18.
34	15.	14.	10.	5.	6.	-28.	22.	23.	16.	13.
35	-3.	0.	14.	-5.	-7.	-13.	-32.	-45.	15.	-4.
36	9.	4.	16.	8.	11.	-2.	18.	23.	15.	10.
37	21.	8.	14.	10.	10.	-5.	33.	33.	21.	14.
38	12.	15.	13.	9.	13.	7.	34.	36.	13.	18.
39	17.	19.	24.	14.	18.	59.	20.	21.	13.	11.
40	13.	-2.	-42.	15.	15.	45.	38.	33.	9.	13.
41	16.	2.	12.	-3.	1.	-130.	12.	7.	13.	9.
42	13.	7.	12.	7.	9.	68.	27.	24.	15.	17.
43	30.	23.	32.	30.	37.	-1104.	54.	55.	54.	36.
44	40.	32.	68.	53.	63.	-2164.	42.	57.	53.	38.
45	28.	21.	27.	20.	25.	-137.	56.	51.	33.	35.
46	19.	8.	-20.	11.	13.	88.	38.	35.	18.	24.
47	11.	0.	-7.	8.	15.	-314.	34.	36.	14.	18.
48	18.	17.	16.	10.	11.	107.	31.	36.	12.	29.
49	21.	-10.	-3.	12.	16.	11.	41.	42.	20.	27.
50	28.	9.	16.	15.	15.	-91.	28.	27.	24.	23.
51	34.	54.	-1211.	-57.	25.	-2369.	50.	63.	64.	40.
52	-13.	-18.	23.	37.	44.	-1618.	37.	52.	44.	29.

MATRIX : % DIFFERENCE IN MULTIPLIERS: UN/MRIO

COLUMN	21	22	23	24	25	26	27	28	29	30
ROW										
53	18.	-2.	3.	25.	31.	-693.	42.	49.	29.	28.
54	16.	0.	14.	11.	12.	-9.	23.	26.	10.	14.
55	19.	11.	14.	19.	18.	-10.	35.	34.	9.	16.
56	14.	-5.	-26.	6.	9.	-67.	-18.	11.	21.	7.
57	8.	-29.	-210.	-37.	-8.	-142.	3.	-1.	5.	9.
58	3.	8.	17.	18.	18.	-326.	29.	37.	32.	19.
59	9.	-12.	-7.	4.	8.	-23.	20.	32.	6.	11.
60	16.	-20.	-79.	1.	5.	14.	-103.	-6.	-8.	-11.
61	22.	17.	23.	17.	17.	-116.	33.	34.	29.	20.
62	16.	-19.	-2.	-10.	3.	-5.	9.	26.	-25.	12.
63	29.	23.	3.	3.	4.	30.	34.	22.	53.	30.
64	8.	5.	19.	1.	3.	-111.	20.	13.	17.	14.
65	18.	10.	16.	9.	9.	40.	26.	27.	18.	15.
66	17.	10.	13.	9.	9.	1.	23.	27.	22.	14.
67	42.	34.	38.	33.	32.	31.	53.	54.	48.	40.
68	21.	15.	20.	12.	14.	-20.	32.	33.	21.	22.
69	16.	9.	14.	8.	9.	26.	22.	23.	16.	13.
70	15.	9.	14.	9.	9.	27.	23.	25.	15.	13.
71	16.	10.	11.	9.	8.	19.	22.	27.	22.	13.
72	17.	10.	11.	7.	8.	12.	17.	21.	18.	12.
73	14.	9.	14.	8.	9.	-22.	11.	21.	16.	11.
74	16.	10.	15.	12.	11.	-80.	25.	29.	22.	14.
75	17.	12.	14.	11.	12.	-43.	23.	28.	21.	14.
76	18.	11.	14.	10.	9.	8.	26.	27.	22.	16.
77	21.	16.	20.	16.	17.	-83.	30.	36.	36.	20.
78	17.	13.	16.	9.	12.	-10.	28.	29.	20.	17.

MATRIX : % DIFFERENCE IN MULTIPLIERS: UN/MRIO

COLUMN	31	32	33	34	35	36	37	38	39	40
ROW										
1	2.	14.	7.	12.	12.	10.	7.	10.	14.	21.
2	-0.	18.	12.	15.	13.	12.	8.	12.	15.	22.
3	-18.	6.	3.	6.	12.	1.	5.	10.	15.	-4.
4	2.	21.	19.	22.	20.	7.	10.	14.	16.	11.
5	-37.	20.	27.	22.	18.	10.	9.	-28.	16.	26.
6	-41.	26.	29.	27.	19.	17.	-11.	14.	6.	28.
7	-12.	25.	10.	18.	17.	12.	10.	7.	16.	27.
8	10.	26.	20.	22.	20.	7.	17.	19.	19.	24.
9	3.	-13.	16.	9.	5.	10.	8.	8.	14.	17.
10	-150.	45.	24.	36.	26.	17.	5.	2.	22.	28.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	9.	19.	5.	8.	10.	12.	12.	14.	14.	21.
13	-37.	-1.	-14.	-7.	30.	10.	-211.	-644.	-79.	-367.
14	-3.	11.	4.	9.	11.	9.	5.	7.	10.	18.
15	10.	17.	12.	11.	9.	10.	5.	6.	5.	16.
16	2.	12.	-30.	4.	-5.	7.	-0.	7.	8.	5.
17	11.	14.	-39.	6.	5.	0.	-41.	-3.	3.	-11.
18	0.	7.	1.	-10.	5.	8.	4.	3.	6.	15.
19	-58.	-23.	7.	3.	-27.	11.	-28.	-21.	-9.	-34.
20	4.	0.	6.	6.	7.	4.	1.	6.	10.	4.
21	-21.	15.	10.	8.	5.	5.	-7.	-3.	-0.	12.
22	0.	-501.	-21.	-27.	-36.	-10.	-107.	-884.	-87.	-398.
23	6.	-586.	-14.	-144.	-153.	-129.	-124.	-413.	-75.	-1156.
24	5.	19.	15.	13.	7.	9.	8.	3.	13.	19.
25	-0.	14.	6.	6.	4.	4.	-17.	-14.	4.	9.
26	27.	29.	22.	23.	20.	23.	24.	23.	17.	32.
27	-23.	29.	9.	22.	9.	10.	4.	10.	16.	20.
28	-6.	15.	-33.	11.	11.	-4.	-10.	9.	10.	8.
29	9.	-7.	4.	8.	0.	8.	1.	3.	-4.	17.
30	7.	7.	10.	9.	5.	8.	-27.	-29.	6.	14.
31	1.	17.	12.	14.	10.	9.	9.	10.	12.	19.
32	9.	1.	-2.	5.	4.	4.	-10.	-14.	4.	-24.
33	-2.	-255.	0.	5.	-7.	8.	3.	4.	7.	6.
34	7.	-42.	-107.	0.	-3.	12.	-34.	-36.	-9.	6.
35	1.	6.	7.	8.	0.	-30.	-81.	-93.	-46.	13.
36	6.	-34.	9.	6.	5.	1.	-3.	3.	1.	5.
37	6.	-7.	18.	11.	3.	7.	1.	-59.	7.	17.
38	1.	-4.	24.	14.	5.	10.	-7.	4.	2.	19.
39	1.	19.	8.	14.	18.	1.	-3.	-1.	0.	23.
40	11.	-5.	6.	5.	4.	8.	-43.	-22.	-44.	0.
41	13.	-22.	10.	4.	-16.	-4.	-1.	-18.	3.	10.
42	-3.	5.	10.	7.	5.	9.	0.	-16.	4.	14.
43	19.	31.	31.	34.	25.	14.	3.	14.	-7.	-3.
44	41.	47.	27.	33.	43.	35.	-3.	32.	-78.	-7.
45	9.	26.	23.	25.	20.	10.	11.	15.	16.	26.
46	2.	20.	10.	11.	13.	11.	9.	13.	14.	2.
47	16.	-49.	19.	-3.	1.	-11.	-26.	2.	-9.	4.
48	-134.	24.	24.	19.	21.	12.	-1.	-11.	17.	-19.
49	14.	-45.	19.	6.	10.	4.	3.	1.	7.	2.
50	11.	-11.	21.	10.	8.	-2.	9.	13.	15.	17.
51	41.	61.	39.	42.	15.	-479.	-97.	12.	-119.	11.
52	19.	23.	24.	29.	9.	20.	5.	-57.	-20.	4.

MATRIX : % DIFFERENCE IN MULTIPLIERS: UN/MRIO

COLUMN	31	32	33	34	35	36	37	38	39	40
ROW										
53	17.	-12.	27.	18.	-4.	1.	5.	-20.	5.	7.
54	8.	18.	8.	10.	-10.	11.	-8.	10.	3.	-49.
55	10.	-15.	4.	7.	-17.	8.	-5.	-29.	2.	-50.
56	11.	-57.	9.	-1.	8.	-9.	-14.	-272.	-8.	-55.
57	16.	-53.	9.	-10.	0.	-74.	-22.	-503.	-19.	-16.
58	16.	-1.	17.	16.	-12.	9.	-6.	-47.	-6.	-67.
59	6.	-155.	9.	-12.	-1.	3.	-39.	-45.	-23.	-138.
60	10.	-246.	1.	-24.	-11.	-31.	-11.	-271.	-3.	-137.
61	13.	22.	9.	15.	10.	15.	-10.	16.	0.	-9.
62	13.	-80.	4.	1.	-9.	1.	3.	-24.	3.	13.
63	32.	24.	29.	22.	-7.	26.	22.	19.	31.	27.
64	15.	-6.	-3.	4.	7.	11.	8.	8.	6.	11.
65	8.	18.	9.	11.	8.	10.	8.	9.	10.	20.
66	7.	16.	10.	9.	9.	10.	7.	8.	9.	16.
67	33.	42.	36.	35.	33.	34.	30.	30.	33.	41.
68	2.	23.	12.	15.	11.	13.	10.	14.	13.	23.
69	5.	15.	7.	8.	6.	9.	5.	8.	8.	16.
70	8.	15.	7.	8.	8.	8.	8.	9.	10.	17.
71	14.	16.	11.	11.	10.	7.	9.	10.	12.	16.
72	7.	14.	9.	9.	7.	7.	3.	2.	7.	16.
73	7.	15.	10.	9.	7.	8.	6.	7.	7.	14.
74	11.	14.	11.	11.	11.	9.	9.	9.	7.	15.
75	10.	16.	14.	11.	10.	8.	7.	8.	7.	16.
76	10.	17.	13.	12.	10.	10.	7.	7.	10.	17.
77	16.	24.	14.	11.	16.	16.	14.	15.	2.	21.
78	5.	20.	7.	12.	10.	10.	9.	10.	11.	19.

MATRIX ; % DIFFERENCE IN MULTIPLIERS: UN/MRIO

COLUMN	41	42	43	44	45	46	47	48	49	50
ROW										
1	12.	30.	26.	21.	23.	31.	26.	24.	21.	21.
2	6.	26.	24.	21.	24.	33.	25.	25.	20.	22.
3	-7.	13.	15.	2.	16.	11.	16.	22.	-3.	15.
4	8.	25.	21.	18.	14.	22.	23.	16.	12.	19.
5	28.	28.	31.	14.	25.	35.	11.	23.	31.	15.
6	25.	39.	23.	14.	18.	29.	24.	29.	32.	9.
7	28.	31.	32.	16.	26.	35.	16.	25.	31.	18.
8	30.	37.	34.	23.	29.	39.	31.	33.	36.	24.
9	21.	30.	33.	15.	23.	24.	1.	16.	25.	21.
10	27.	48.	30.	22.	28.	38.	5.	27.	-14.	24.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	21.	30.	28.	15.	19.	26.	19.	-2.	23.	16.
13	-2474.	4.	145.	-149.	-225.	246.	-395.	-89.	-655.	160.
14	14.	25.	24.	18.	19.	27.	22.	22.	20.	17.
15	14.	25.	24.	15.	19.	27.	22.	22.	22.	16.
16	-52.	11.	-19.	-5.	10.	25.	4.	16.	-17.	11.
17	-93.	26.	-75.	-8.	11.	20.	-9.	6.	-38.	-9.
18	15.	24.	23.	12.	18.	24.	20.	21.	21.	15.
19	-134.	16.	-462.	-85.	-131.	-190.	-4.	-22.	-172.	-170.
20	8.	16.	12.	-0.	14.	9.	13.	21.	8.	14.
21	13.	22.	23.	11.	15.	-33.	7.	12.	7.	15.
22	-835.	-547.	-904.	-939.	-288.	-453.	-254.	-583.	-2337.	-387.
23	-1523.	-2358.	-3617.	12.	-845.	-1637.	-673.	-662.	-1045.	-1104.
24	5.	21.	27.	19.	25.	30.	26.	26.	12.	23.
25	13.	24.	25.	9.	13.	12.	13.	6.	7.	14.
26	11.	32.	39.	31.	34.	45.	38.	37.	26.	31.
27	15.	30.	22.	17.	23.	33.	13.	21.	8.	15.
28	-11.	23.	-5.	12.	26.	37.	9.	12.	-9.	5.
29	19.	4.	27.	19.	18.	25.	23.	25.	22.	18.
30	10.	26.	-36.	7.	10.	17.	5.	1.	-18.	-15.
31	20.	26.	26.	15.	19.	28.	21.	23.	26.	12.
32	4.	20.	-12.	6.	16.	28.	6.	15.	-11.	-1.
33	-14.	8.	16.	19.	-11.	-11.	4.	26.	26.	2.
34	-49.	29.	16.	-10.	5.	-15.	1.	6.	-5.	16.
35	-83.	-11.	-233.	-50.	-78.	-156.	-50.	-43.	-185.	-106.
36	10.	26.	29.	13.	20.	14.	20.	15.	26.	17.
37	20.	24.	24.	12.	19.	26.	18.	21.	24.	12.
38	20.	30.	23.	10.	13.	21.	18.	21.	24.	11.
39	18.	27.	14.	17.	20.	29.	10.	19.	-2.	13.
40	-105.	-98.	-3.	-66.	17.	18.	18.	26.	26.	-80.
41	0.	19.	23.	12.	12.	19.	17.	16.	-1.	-1.
42	6.	1.	9.	5.	15.	13.	7.	19.	19.	12.
43	12.	-32.	3.	16.	23.	25.	-25.	23.	-0.	-366.
44	18.	-78.	42.	1.	-378.	-25.	30.	-55.	-13.	42.
45	29.	20.	4.	-291.	1.	-255.	-18.	-7.	-70.	20.
46	12.	-51.	23.	-22.	-284.	2.	5.	-123.	-111.	-16.
47	-7.	9.	30.	9.	22.	24.	2.	21.	24.	16.
48	19.	27.	-2.	-84.	-226.	-242.	-264.	2.	-148.	-186.
49	-29.	-54.	28.	17.	20.	30.	24.	23.	2.	-41.
50	11.	14.	32.	19.	8.	34.	-60.	14.	-37.	2.
51	13.	49.	-1.	-158.	-70.	14.	-65.	-104.	-1149.	15.
52	-91.	-111.	-122.	-99.	-44.	-308.	-83.	-96.	-293.	-46.

MATRIX ..: % DIFFERENCE IN MULTIPLIERS: UN/MRIO

COLUMN	41	42	43	44	45	46	47	48	49	50
ROW										
53	-31.	-1.	10.	-5.	14.	33.	24.	24.	25.	-19.
54	-127.	6.	-17.	-7.	-5.	-140.	-8.	-37.	-44.	7.
55	-23.	-16.	-82.	12.	-25.	-23.	1.	-27.	-19.	-53.
56	-282.	-62.	-525.	-81.	-121.	-176.	-107.	-86.	-354.	-193.
57	-196.	-54.	-190.	-74.	-43.	-40.	-32.	-35.	-108.	-190.
58	-47.	-40.	35.	19.	7.	28.	-27.	-84.	-68.	11.
59	-531.	-71.	-496.	-33.	-163.	-742.	-38.	-106.	-681.	-989.
60	-637.	-210.	-2073.	-137.	-357.	-911.	-159.	-280.	-348.	-721.
61	11.	-1.	-183.	-123.	5.	1.	15.	-5.	20.	16.
62	-67.	-59.	8.	1.	-11.	-79.	-49.	7.	24.	-69.
63	18.	35.	21.	28.	28.	32.	28.	29.	29.	24.
64	-49.	26.	26.	-17.	17.	-12.	14.	9.	-13.	17.
65	19.	27.	24.	14.	20.	29.	18.	22.	23.	14.
66	17.	24.	23.	14.	17.	27.	20.	20.	22.	14.
67	40.	51.	50.	39.	43.	55.	47.	47.	49.	39.
68	23.	32.	26.	16.	23.	30.	22.	24.	27.	18.
69	13.	24.	24.	13.	18.	26.	19.	21.	20.	12.
70	18.	25.	22.	13.	19.	26.	20.	18.	20.	16.
71	18.	25.	20.	14.	14.	25.	19.	21.	19.	16.
72	10.	22.	20.	14.	16.	23.	21.	20.	20.	13.
73	13.	22.	23.	13.	16.	23.	19.	17.	19.	14.
74	12.	24.	5.	10.	11.	20.	20.	17.	16.	7.
75	15.	25.	24.	16.	18.	26.	23.	20.	22.	17.
76	16.	25.	24.	15.	19.	28.	22.	22.	23.	15.
77	22.	31.	30.	22.	23.	31.	27.	23.	28.	21.
78	20.	27.	27.	15.	20.	26.	19.	19.	22.	13.

MATRIX : : % DIFFERENCE IN MULTIPLIERS: UN/MRIO

COLUMN / ROW	51	52	53	54	55	56	57	58	59	60
1	10.	38.	21.	34.	21.	17.	29.	26.	21.	19.
2	11.	39.	19.	38.	21.	14.	28.	28.	28.	20.
3	0.	34.	14.	28.	11.	20.	19.	22.	8.	-15.
4	1.	34.	19.	30.	19.	19.	26.	14.	24.	12.
5	2.	39.	24.	31.	24.	9.	18.	1.	14.	14.
6	31.	48.	33.	31.	17.	11.	36.	19.	8.	26.
7	8.	41.	25.	34.	27.	18.	31.	17.	15.	17.
8	11.	47.	32.	34.	31.	23.	35.	27.	20.	25.
9	3.	29.	9.	33.	24.	14.	30.	24.	11.	20.
10	36.	58.	17.	54.	38.	39.	57.	60.	28.	17.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	-9.	38.	18.	24.	22.	16.	25.	17.	13.	16.
13	-185.	-1534.	-150.	-439.	-4247.	11.	-1364.	-185.	-110.	-4368.
14	6.	34.	18.	31.	17.	13.	26.	25.	14.	16.
15	6.	33.	18.	28.	15.	13.	25.	25.	12.	15.
16	-1.	29.	-1.	34.	11.	-6.	-8.	14.	31.	6.
17	11.	40.	9.	27.	19.	9.	0.	10.	17.	-18.
18	19.	32.	16.	20.	14.	12.	23.	22.	9.	13.
19	-148.	-29.	-34.	-52.	-8.	-31.	-159.	-539.	10.	-40.
20	-1.	36.	12.	26.	9.	19.	19.	12.	8.	-19.
21	12.	41.	1.	19.	13.	12.	21.	22.	7.	-19.
22	-511.	-1323.	-496.	-351.	-4106.	16.	-1578.	-358.	-18.	-19.
23	-549.	-3177.	-281.	-568.	-3146.	-1408.	-1131.	-633.	-22.	26.
24	18.	41.	23.	36.	21.	28.	30.	27.	18.	14.
25	10.	35.	-4.	31.	20.	14.	24.	27.	12.	0.
26	-31.	50.	33.	50.	27.	29.	36.	26.	27.	21.
27	22.	44.	17.	37.	25.	23.	32.	36.	20.	9.
28	25.	45.	10.	38.	21.	14.	25.	34.	19.	-7.
29	-63.	28.	15.	30.	19.	21.	24.	14.	13.	17.
30	-10.	35.	8.	28.	18.	11.	12.	-45.	6.	12.
31	3.	36.	22.	24.	21.	14.	23.	16.	12.	15.
32	16.	36.	-3.	31.	16.	9.	19.	26.	7.	-21.
33	-32.	-4.	-0.	8.	-8.	-12.	7.	-8.	-13.	-3.
34	-10.	19.	-32.	34.	-1.	-4.	17.	6.	8.	9.
35	42.	-9.	-48.	8.	17.	21.	26.	-47.	6.	-4.
36	-18.	36.	15.	27.	19.	8.	24.	25.	7.	21.
37	-8.	29.	17.	23.	19.	2.	9.	-5.	7.	8.
38	21.	38.	23.	22.	17.	7.	25.	25.	7.	17.
39	8.	41.	12.	40.	26.	3.	33.	32.	17.	16.
40	-104.	-6.	19.	-57.	-13.	-18.	-25.	-28.	-22.	-41.
41	20.	37.	4.	25.	14.	13.	22.	-4.	6.	18.
42	13.	36.	10.	24.	14.	11.	18.	5.	6.	14.
43	-230.	33.	31.	3.	17.	-156.	-30.	-264.	3.	-156.
44	-299.	21.	16.	75.	50.	-12.	17.	36.	-3.	42.
45	-79.	36.	24.	37.	26.	18.	32.	21.	-15.	-5.
46	-48.	-71.	11.	29.	21.	-15.	-75.	-13.	-16.	0.
47	-1.	30.	18.	11.	13.	6.	16.	13.	6.	24.
48	-285.	29.	-6.	-27.	-11.	6.	41.	-16.	3.	-15.
49	-19.	26.	20.	-15.	8.	-38.	-56.	21.	1.	12.
50	-46.	17.	5.	23.	3.	-17.	-79.	-60.	8.	26.
51	4.	-1209.	-33.	85.	-44.	-12.	-30.	-663.	-146.	-57.
52	-659.	2.	-644.	10.	4.	7.	-30.	-305.	5.	-79.

MATRIX : % DIFFERENCE IN MULTIPLIERS: UN/MRIO

COLUMN / ROW	51	52	53	54	55	56	57	58	59	60
53	8.	41.	2.	15.	18.	9.	-62.	29.	-2.	-10.
54	-213.	-79.	-642.	1.	-1.	3.	22.	0.	-34.	-34.
55	23.	36.	12.	29.	1.	13.	8.	27.	6.	6.
56	-28.	-306.	-15.	-198.	-934.	1.	-133.	-168.	4.	6.
57	27.	-102.	15.	-119.	-627.	16.	1.	19.	-0.	-5.
58	-38.	41.	1.	-150.	23.	-14.	-220.	1.	7.	1.
59	-640.	-335.	-211.	-404.	-119.	-124.	-846.	-1188.	2.	-127.
60	-163.	-471.	-76.	-265.	-1169.	-273.	-590.	-140.	-117.	3.
61	-162.	33.	19.	27.	22.	17.	2.	9.	-9.	-78.
62	-132.	34.	-96.	34.	-73.	-281.	-65.	-55.	6.	20.
63	-106.	10.	20.	26.	-30.	-11.	-10.	27.	19.	13.
64	-34.	36.	-47.	33.	-3.	3.	24.	21.	8.	-1.
65	7.	36.	19.	28.	19.	14.	24.	19.	10.	15.
66	6.	32.	18.	24.	12.	13.	23.	19.	11.	10.
67	28.	61.	44.	48.	35.	38.	50.	48.	35.	34.
68	1.	40.	23.	32.	22.	17.	31.	25.	14.	18.
69	10.	36.	15.	23.	16.	13.	23.	22.	9.	11.
70	7.	33.	20.	23.	15.	12.	22.	15.	10.	10.
71	-6.	32.	17.	27.	17.	16.	24.	16.	14.	13.
72	6.	25.	17.	24.	12.	11.	23.	22.	10.	15.
73	-1.	30.	4.	33.	15.	12.	22.	17.	10.	12.
74	-19.	30.	16.	23.	15.	13.	17.	-18.	7.	10.
75	5.	32.	18.	26.	16.	15.	26.	22.	12.	15.
76	6.	34.	19.	23.	12.	14.	24.	22.	12.	11.
77	-56.	39.	16.	41.	22.	20.	30.	22.	16.	16.
78	-5.	36.	18.	30.	19.	14.	26.	21.	12.	14.

MATRIX : % DIFFERENCE IN MULTIPLIERS: UN/MRIO

COLUMN / ROW	61	62	63	64	65	66	67	68	69	70
1	21.	27.	4.	10.	12.	-2.	504.	37.	22.	16.
2	22.	37.	8.	16.	14.	-1.	6.	38.	21.	17.
3	19.	3.	13.	15.	15.	11.	-2019.	34.	21.	29.
4	28.	33.	-4.	20.	17.	6.	-13.	41.	6.	18.
5	18.	23.	24.	23.	16.	11.	-7469.	23.	29.	30.
6	18.	39.	27.	32.	20.	14.	-6337.	39.	32.	36.
7	19.	27.	21.	24.	11.	12.	-3874.	24.	25.	24.
8	23.	33.	19.	18.	13.	10.	-2536.	23.	17.	16.
9	16.	21.	17.	7.	10.	6.	-1533.	26.	15.	8.
10	25.	34.	48.	32.	-6.	2.	-3797.	-0.	22.	53.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	13.	22.	8.	14.	7.	4.	1015.	25.	10.	-11.
13	-940.	-828.	-4217.	-37.	-332.	8.	664.	-13.	-1.	-2.
14	13.	26.	8.	9.	7.	-6.	-326.	31.	13.	11.
15	11.	30.	12.	7.	9.	-8.	-227.	30.	10.	8.
16	21.	31.	-11.	11.	16.	7.	-5559.	37.	20.	27.
17	15.	-4.	-22.	10.	12.	13.	-4554.	41.	22.	36.
18	11.	17.	7.	7.	7.	5.	-1456.	26.	11.	16.
19	15.	-250.	-9.	-109.	9.	0.	-2355.	27.	10.	14.
20	14.	-2.	1.	16.	13.	9.	-3207.	30.	19.	28.
21	-1.	26.	-22.	14.	11.	4.	-2719.	34.	8.	14.
22	12.	-2305.	-2503.	16.	10.	20.	2653.	17.	15.	16.
23	11.	-3317.	-350.	-804.	18.	-16.	-2881.	20.	-2.	-15.
24	15.	25.	11.	19.	32.	15.	-10305.	49.	16.	34.
25	5.	18.	9.	17.	13.	5.	-6461.	35.	8.	34.
26	26.	41.	-1.	-7.	20.	-1.	-8811.	50.	24.	17.
27	20.	18.	19.	27.	12.	4.	-3262.	23.	24.	42.
28	16.	25.	5.	16.	20.	15.	-4610.	42.	18.	34.
29	13.	-119.	-8.	-22.	13.	-63.	-25866.	40.	16.	12.
30	8.	8.	8.	17.	7.	3.	-2717.	26.	13.	1.
31	14.	23.	11.	14.	5.	3.	-3577.	24.	8.	10.
32	7.	24.	4.	16.	6.	4.	-3944.	31.	10.	21.
33	-8.	-125.	-216.	5.	-1.	-11.	128.	23.	11.	10.
34	-2.	19.	7.	16.	10.	-6.	1679.	32.	10.	11.
35	6.	14.	14.	14.	8.	8.	-1684.	30.	10.	10.
36	11.	14.	12.	11.	11.	4.	-5670.	28.	14.	5.
37	10.	15.	8.	15.	10.	6.	-8462.	32.	24.	18.
38	10.	29.	14.	22.	18.	9.	-6831.	37.	29.	23.
39	17.	24.	27.	14.	11.	4.	-2215.	22.	17.	18.
40	11.	-40.	-15.	-21.	8.	4.	263.	26.	10.	-10.
41	3.	26.	-1.	15.	12.	9.	-7753.	38.	13.	17.
42	9.	22.	7.	15.	8.	6.	-6567.	30.	18.	21.
43	11.	-2.	41.	-58.	9.	-96.	-61194.	36.	36.	18.
44	-150.	66.	53.	-110.	30.	-184.	-68452.	68.	42.	15.
45	3.	-2.	35.	19.	12.	-3.	-18514.	27.	23.	12.
46	5.	18.	21.	16.	9.	6.	-995.	27.	15.	5.
47	4.	23.	-62.	-32.	13.	-6.	-27355.	43.	23.	19.
48	-33.	26.	18.	19.	2.	12.	-5604.	11.	27.	68.
49	11.	8.	-35.	-39.	13.	-8.	-21625.	36.	26.	25.
50	8.	-107.	7.	5.	16.	-1.	-13768.	33.	16.	20.
51	-28.	-546.	25.	-91.	24.	-93.	-70131.	67.	42.	13.
52	6.	-3.	35.	-23.	13.	-46.	-55642.	37.	33.	10.

MATRIX : % DIFFERENCE IN MULTIPLIERS: UN/MRIO

COLUMN / ROW	61	62	63	64	65	66	67	68	69	70
53	10.	19.	6.	11.	12.	-20.	-38594.	36.	34.	17.
54	12.	1.	8.	-2.	9.	1.	-52.	26.	11.	3.
55	9.	28.	5.	15.	10.	8.	-2155.	26.	11.	6.
56	-57.	-493.	-684.	-40.	7.	5.	3069.	26.	11.	9.
57	-48.	9.	-156.	6.	5.	20.	1091.	27.	15.	16.
58	5.	-27.	-106.	-13.	6.	-4.	-22156.	37.	11.	13.
59	-1.	-458.	31.	-25.	4.	2.	-6073.	23.	7.	9.
60	-417.	-191.	-1544.	-145.	6.	-80.	-1361.	21.	2.	3.
61	1.	27.	22.	-28.	5.	-24.	-13644.	30.	19.	18.
62	-15.	3.	-261.	-53.	11.	-18.	-8728.	30.	16.	7.
63	15.	34.	1.	-5.	24.	-36.	-750.	55.	30.	17.
64	-8.	30.	-0.	1.	11.	-12.	-4421.	35.	14.	8.
65	13.	25.	15.	16.	0.	-0.	-1507.	26.	11.	16.
66	10.	29.	9.	8.	6.	-0.	2340.	28.	8.	6.
67	34.	54.	33.	32.	29.	20.	21.	57.	32.	27.
68	17.	28.	20.	16.	7.	2.	-1085.	5.	10.	8.
69	11.	25.	12.	15.	6.	-1.	-1523.	27.	0.	10.
70	11.	23.	8.	11.	5.	2.	1362.	26.	7.	1.
71	12.	25.	7.	5.	7.	-3.	-60.	28.	7.	6.
72	8.	26.	9.	8.	9.	-5.	-153.	30.	8.	10.
73	10.	26.	10.	10.	8.	-4.	-58.	27.	7.	6.
74	11.	21.	7.	3.	4.	1.	-8231.	28.	7.	8.
75	12.	29.	8.	5.	13.	-1.	3694.	31.	7.	18.
76	11.	28.	10.	9.	7.	-1.	-584.	29.	9.	5.
77	17.	36.	16.	-5.	10.	-12.	-21679.	30.	12.	6.
78	14.	27.	13.	8.	5.	1.	-3171.	26.	7.	8.

MATRIX H: % DIFFERENCE IN MULTIPLIERS: UN/MRIO

ROW \ COLUMN	71	72	73	74	75	76	77	78
1	29.	12.	56.	17.	8.	7.	8.	-80.
2	21.	16.	58.	20.	13.	8.	14.	28.
3	21.	14.	70.	12.	18.	19.	-9.	364.
4	18.	19.	62.	13.	18.	15.	-175.	44.
5	33.	25.	79.	19.	29.	22.	2.	321.
6	35.	32.	86.	20.	32.	28.	-19.	339.
7	32.	21.	69.	21.	26.	16.	-0.	-205.
8	24.	14.	58.	15.	17.	13.	-160.	-1051.
9	14.	11.	55.	12.	10.	11.	-15.	339.
10	43.	31.	93.	30.	40.	31.	-126.	493.
11	0.	0.	0.	0.	0.	0.	0.	0.
12	12.	3.	28.	5.	3.	6.	-21.	358.
13	-25.	-21.	22.	-59.	-32.	-17.	-12.	10.
14	24.	7.	50.	11.	6.	3.	5.	-87.
15	21.	5.	47.	10.	5.	2.	4.	-112.
16	28.	14.	66.	22.	18.	25.	36.	151.
17	30.	17.	76.	18.	21.	25.	29.	64.
18	18.	4.	58.	7.	10.	7.	-21.	-47.
19	23.	5.	53.	8.	11.	4.	28.	320.
20	15.	14.	76.	12.	19.	21.	-10.	347.
21	26.	16.	65.	12.	14.	11.	-202.	17.
22	-2.	-4.	44.	-40.	1.	-12.	9.	-53.
23	8.	-42.	20.	-53.	-7.	-15.	16.	274.
24	38.	17.	95.	21.	49.	44.	2.	276.
25	28.	13.	66.	15.	21.	19.	-87.	92.
26	35.	15.	63.	25.	16.	11.	18.	125.
27	22.	17.	66.	22.	13.	20.	-21.	368.
28	27.	20.	76.	18.	22.	25.	20.	229.
29	29.	4.	47.	14.	-1.	0.	16.	281.
30	12.	8.	46.	3.	6.	7.	-16.	341.
31	16.	6.	51.	6.	8.	5.	-9.	-59.
32	17.	11.	61.	5.	13.	10.	10.	50.
33	16.	6.	47.	-17.	2.	-5.	4.	158.
34	25.	3.	50.	9.	5.	7.	7.	-22.
35	14.	20.	53.	3.	11.	9.	-7.	232.
36	14.	7.	53.	5.	8.	8.	-10.	352.
37	23.	18.	68.	13.	17.	14.	10.	253.
38	25.	23.	75.	19.	21.	19.	1.	279.
39	25.	15.	60.	14.	14.	11.	-12.	312.
40	12.	2.	31.	-4.	3.	6.	-20.	341.
41	24.	21.	67.	5.	12.	11.	13.	12.
42	18.	10.	62.	6.	15.	14.	-1.	223.
43	41.	3.	51.	5.	0.	-40.	9.	-284.
44	48.	-3.	47.	33.	-6.	-60.	-3.	245.
45	16.	14.	48.	11.	12.	6.	-5.	104.
46	15.	5.	50.	4.	11.	11.	-15.	360.
47	29.	12.	57.	10.	3.	4.	14.	37.
48	36.	23.	103.	13.	43.	47.	-43.	426.
49	21.	-1.	72.	7.	13.	9.	4.	159.
50	29.	4.	67.	5.	13.	1.	13.	-180.
51	47.	-9.	51.	-4.	-9.	-87.	-7.	232.
52	18.	4.	48.	8.	-3.	-28.	0.	345.

MATRIX : % DIFFERENCE IN MULTIPLIERS: UN/MRIO

COLUMN / ROW	71	72	73	74	75	76	77	78
53	27.	6.	52.	8.	7.	-9.	-8.	178.
54	13.	3.	43.	0.	5.	5.	9.	334.
55	14.	10.	57.	7.	9.	11.	-36.	339.
56	12.	-15.	44.	1.	-2.	15.	-8.	76.
57	12.	4.	59.	3.	-5.	5.	7.	-441.
58	24.	-0.	53.	4.	4.	-4.	4.	-271.
59	11.	-7.	35.	4.	6.	-1.	16.	-615.
60	-11.	-51.	13.	-75.	-33.	-13.	24.	-3058.
61	28.	5.	49.	9.	8.	1.	22.	-213.
62	17.	11.	49.	4.	-0.	3.	5.	315.
63	40.	4.	49.	25.	5.	5.	-11.	212.
64	19.	4.	48.	11.	6.	1.	-14.	268.
65	21.	9.	56.	10.	8.	7.	22.	-264.
66	18.	5.	48.	6.	6.	6.	-40.	21.
67	41.	26.	79.	31.	27.	21.	-28.	208.
68	20.	9.	50.	11.	9.	4.	-155.	-219.
69	15.	6.	50.	4.	6.	4.	-9.	81.
70	13.	4.	44.	5.	5.	7.	-55.	7.
71	0.	4.	47.	5.	5.	2.	-15.	-385.
72	22.	0.	49.	8.	5.	2.	-4.	-24.
73	15.	6.	2.	8.	5.	5.	-20.	158.
74	17.	3.	47.	0.	5.	0.	-6.	-223.
75	21.	7.	47.	11.	1.	326.	-305.	-105.
76	17.	4.	48.	8.	5.	0.	-40.	155.
77	16.	3.	46.	13.	3.	-3.	-0.	-309.
78	18.	4.	48.	6.	6.	1.	-1.	-0.

MATRIX ·: % DIFFERENCE IN MULTIPLIERS: OBE/MRIO

COLUMN	1	2	3	4	5	6	7	8	9	10
ROW										
1	0.	4.	508.	22.	243.	109.	115.	385.	103.	98.
2	4.	2.	1084.	654.	416.	177.	197.	628.	153.	153.
3	8.	21.	0.	42.	20.	5.	5.	17.	52.	25.
4	2.	2.	14.	1.	156.	64.	64.	251.	78.	69.
5	25.	24.	35.	87.	0.	57.	10.	23.	26.	121.
6	36.	30.	54.	83.	487.	0.	55.	35.	365.	50.
7	18.	24.	56.	78.	6.	9.	0.	37.	76.	11.
8	19.	20.	38.	197.	25.	37.	21.	0.	52.	23.
9	11.	7.	160.	237.	5.	78.	68.	15.	1.	6.
10	48.	38.	323.	429.	115.	573.	81.	101.	285.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	8.	8.	112.	127.	16.	16.	13.	3.	26.	22.
13	997.	979.	548.	993.	1763.	1572.	2370.	1010.	2514.	4103.
14	1.	11.	43.	15.	46.	33.	32.	47.	44.	37.
15	17.	24.	12.	24.	22.	10.	10.	17.	55.	14.
16	56.	48.	33.	45.	64.	33.	41.	94.	52.	26.
17	11.	10.	2.	5.	38.	27.	25.	31.	35.	41.
18	57.	86.	45.	56.	65.	40.	46.	104.	91.	44.
19	7.	7.	39.	116.	76.	62.	64.	94.	126.	82.
20	24.	27.	62.	45.	20.	5.	5.	16.	63.	25.
21	5.	2.	105.	17.	75.	58.	59.	107.	56.	41.
22	1015.	1124.	140.	3945.	490.	381.	280.	429.	1327.	438.
23	461.	302.	240.	2837.	523.	675.	436.	264.	1355.	776.
24	28.	65.	49.	17.	104.	60.	59.	76.	58.	30.
25	7.	13.	23.	4.	41.	26.	24.	44.	48.	32.
26	245.	530.	243.	504.	585.	335.	375.	403.	406.	343.
27	11.	6.	126.	214.	13.	5.	9.	14.	22.	22.
28	58.	92.	22.	44.	64.	70.	36.	68.	40.	85.
29	19.	160.	159.	107.	176.	278.	168.	193.	236.	123.
30	23.	31.	15.	80.	33.	38.	27.	8.	45.	40.
31	13.	15.	30.	194.	20.	45.	18.	29.	53.	23.
32	14.	14.	59.	107.	11.	9.	5.	20.	6.	14.
33	20.	29.	69.	19.	81.	51.	75.	91.	145.	54.
34	12.	43.	50.	6.	105.	63.	88.	91.	131.	57.
35	5.	24.	29.	50.	42.	40.	26.	24.	39.	39.
36	35.	27.	82.	134.	20.	25.	23.	8.	1790.	57.
37	28.	37.	29.	74.	10.	10.	10.	20.	18.	9.
38	40.	42.	39.	62.	27.	33.	31.	30.	35.	20.
39	4.	13.	5.	81.	31.	22.	26.	29.	46.	34.
40	42.	38.	99.	426.	35.	26.	47.	9.	46.	27.
41	17.	42.	61.	107.	43.	41.	36.	48.	43.	36.
42	10.	11.	11.	4.	26.	17.	13.	18.	40.	28.
43	22.	16.	51.	236.	5.	3.	2.	12.	4.	5.
44	6.	3.	987.	610.	708.	1259.	1890.	376.	1544.	1484.
45	67.	65.	182.	418.	4.	3.	1.	8.	6.	3.
46	35.	35.	145.	237.	74.	11.	85.	32.	6.	4.
47	65.	61.	64.	98.	21.	28.	15.	58.	43.	34.
48	52.	42.	112.	152.	136.	74.	147.	225.	214.	128.
49	47.	32.	47.	280.	34.	36.	26.	13.	10.	18.
50	19.	17.	55.	151.	70.	1.	8.	51.	13.	10.
51	520.	529.	1159.	1652.	626.	776.	859.	840.	996.	815.
52	44.	43.	204.	398.	62.	101.	108.	48.	183.	148.

MATRIX ': % DIFFERENCE IN MULTIPLIERS: OBE/MRIO

COLUMN	1	2	3	4	5	6	7	8	9	10
ROW										
53	54.	53.	58.	142.	35.	40.	12.	5.	17.	6.
54	116.	122.	159.	469.	201.	220.	269.	119.	457.	377.
55	26.	26.	1.	192.	34.	24.	4.	25.	40.	12.
56	141.	177.	288.	325.	231.	188.	491.	87.	579.	313.
57	112.	159.	252.	185.	118.	254.	210.	19.	219.	131.
58	12.	10.	18.	248.	27.	31.	28.	34.	28.	32.
59	29.	34.	96.	296.	42.	60.	43.	60.	24.	66.
60	93.	164.	183.	166.	98.	439.	633.	165.	814.	176.
61	27.	43.	1.	134.	42.	28.	15.	92.	240.	46.
62	90.	104.	72.	420.	55.	97.	168.	42.	145.	164.
63	60.	69.	99.	150.	65.	56.	60.	79.	86.	60.
64	99.	129.	59.	119.	123.	41.	103.	72.	158.	90.
65	4.	10.	18.	33.	2.	7.	6.	6.	24.	3.
66	16.	23.	76.	101.	31.	20.	20.	34.	46.	12.
67	53951.	351956.	416189.	249928.	424045.	209976.	215807.	302189.	416118.	84984.
68	11.	13.	71.	96.	9.	6.	5.	27.	13.	4.
69	5.	8.	23.	43.	13.	8.	7.	18.	14.	8.
70	9.	12.	62.	84.	20.	6.	7.	22.	12.	9.
71	6.	4.	119.	86.	3.	5.	4.	1.	13.	8.
72	32.	67.	22.	40.	64.	27.	29.	62.	38.	31.
73	8.	8.	78.	126.	9.	11.	10.	20.	22.	12.
74	4.	6.	26.	105.	11.	9.	5.	9.	6.	7.
75	474.	731.	141.	270.	648.	268.	290.	403.	290.	316.
76	2.	12.	163.	46.	18.	9.	8.	29.	27.	3.
77	45.	47.	94.	122.	42.	48.	49.	42.	72.	42.
78	1485.	1938.	920.	2066.	1183.	928.	1576.	1303.	643.	809.

RIX : % DIFFERENCE IN MULTIPLIERS: OBE/MRIO

COLUMN	11	12	13	14	15	16	17	18	19	20
W										
1	75.	68.	99.	7.	6.	11.	5.	25.	57.	430.
2	53.	146.	131.	8.	2.	4.	18.	9.	80.	1705.
3	2.	2.	40.	2.	22.	31.	34.	2.	71.	0.
4	24.	31.	87.	7.	2.	4.	13.	9.	75.	33.
5	12.	14.	65.	16.	36.	37.	60.	42.	107.	36.
6	15.	17.	55.	43.	44.	42.	66.	43.	105.	49.
7	14.	18.	61.	14.	17.	13.	27.	17.	72.	27.
8	18.	13.	62.	24.	29.	69.	94.	62.	133.	35.
9	6.	3.	103.	15.	12.	24.	62.	32.	109.	45.
0	112.	103.	198.	58.	56.	91.	130.	102.	210.	123.
1	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
2	22.	0.	67.	15.	13.	20.	28.	20.	61.	26.
3	449.	1261.	1.	875.	400.	735.	861.	498.	808.	969.
4	30.	22.	62.	0.	14.	22.	16.	24.	70.	44.
5	12.	8.	46.	13.	0.	15.	24.	10.	36.	13.
6	27.	35.	82.	61.	54.	1.	26.	3.	79.	49.
7	12.	24.	75.	22.	24.	27.	1.	23.	22.	10.
8	20.	17.	57.	24.	56.	639.	25.	0.	309.	9.
9	42.	75.	205.	9.	21.	417.	38.	16.	0.	94.
0	2.	2.	38.	21.	24.	31.	38.	27.	50.	0.
1	73.	72.	20.	5.	3.	9.	27.	18.	87.	1315.
2	7.	625.	84.	1525.	989.	1926.	2814.	197.	8296.	15231.
3	9.	50.	345.	945.	1317.	786.	1256.	1204.	3796.	2006.
4	41.	28.	104.	12.	20.	20.	24.	22.	112.	83.
5	18.	15.	63.	3.	3.	9.	14.	6.	29.	22.
6	640.	381.	403.	119.	122.	365.	459.	352.	485.	383.
7	24.	19.	76.	20.	17.	19.	41.	25.	91.	27.
8	30.	23.	69.	33.	7.	6.	11.	6.	54.	34.
9	70.	117.	139.	41.	32.	44.	58.	45.	146.	131.
0	6.	1.	147.	26.	43.	69.	140.	61.	156.	7.
1	12.	8.	77.	19.	23.	76.	103.	67.	144.	31.
2	17.	13.	29.	14.	40.	64.	77.	48.	22.	72.
3	31.	38.	82.	28.	28.	32.	80.	9.	465.	29.
4	69.	61.	119.	33.	32.	105.	176.	810.	1887.	269.
5	9.	4.	107.	2.	40.	5.	35.	11.	119.	11.
6	2.	8.	184.	50.	43.	77.	272.	81.	266.	19.
7	12.	14.	64.	14.	43.	63.	83.	56.	115.	36.
8	10.	12.	53.	40.	51.	65.	83.	45.	98.	46.
9	33.	7.	117.	2.	11.	29.	40.	36.	106.	12.
0	1.	3.	1217.	79.	74.	65.	95.	82.	180.	261.
1	32.	33.	240.	19.	81.	86.	111.	79.	274.	123.
2	10.	8.	82.	12.	5.	39.	49.	25.	83.	9.
3	47.	48.	744.	27.	17.	33.	52.	39.	101.	53.
4	205.	290.	521.	13.	4.	12.	41.	27.	100.	567.
5	21.	15.	484.	76.	77.	107.	132.	115.	212.	147.
6	9.	5.	259.	30.	40.	29.	48.	28.	100.	25.
7	58.	57.	145.	72.	63.	101.	143.	104.	211.	92.
8	141.	115.	495.	29.	57.	5.	17.	10.	81.	10.
9	30.	27.	148.	54.	60.	51.	78.	71.	253.	122.
0	36.	35.	147.	26.	32.	54.	78.	57.	117.	53.
1	581.	709.	389.	460.	419.	589.	612.	503.	1009.	670.
2	19.	10.	1540.	47.	52.	71.	91.	68.	141.	163.

MATRIX ' : % DIFFERENCE IN MULTIPLIERS: OBE/MRIO

COLUMN	11	12	13	14	15	16	17	18	19	20
ROW										
53	20.	23.	77.	57.	44.	61.	92.	65.	185.	66.
54	56.	22.	1913.	132.	119.	189.	242.	211.	273.	268.
55	2.	3.	1242.	33.	48.	65.	169.	39.	158.	8.
56	80.	65.	56.	146.	141.	161.	232.	134.	276.	229.
57	131.	98.	51.	85.	90.	126.	170.	96.	591.	208.
58	29.	24.	50.	20.	21.	34.	59.	38.	93.	33.
59	135.	84.	634.	41.	58.	64.	79.	66.	119.	70.
60	319.	288.	220.	110.	169.	117.	168.	179.	407.	147.
61	181.	124.	2107.	22.	40.	47.	58.	55.	122.	15.
62	20.	13.	116.	86.	83.	68.	461.	60.	340.	58.
63	55.	62.	208.	47.	38.	52.	76.	36.	96.	48.
64	56.	18.	160.	102.	125.	83.	12.	6.	199.	316.
65	5.	5.	55.	5.	9.	10.	15.	10.	47.	6.
66	22.	13.	39.	21.	46.	21.	26.	13.	40.	20.
67	476740.	213158.	282846.	217001.	1144615.	398884.	323492.	341141.	406112.	370242.
68	12.	11.	56.	11.	15.	13.	24.	13.	56.	15.
69	4.	3.	50.	6.	8.	8.	10.	5.	28.	10.
70	10.	7.	46.	11.	13.	14.	21.	11.	39.	13.
71	13.	9.	52.	10.	9.	13.	21.	9.	43.	27.
72	28.	17.	51.	15.	18.	27.	29.	22.	39.	31.
73	5.	8.	44.	6.	3.	12.	19.	9.	44.	15.
74	5.	3.	42.	6.	9.	12.	18.	10.	43.	10.
75	404.	203.	348.	506.	615.	336.	347.	274.	340.	302.
76	9.	6.	36.	8.	15.	15.	16.	11.	38.	23.
77	45.	48.	58.	37.	16.	49.	53.	23.	61.	45.
78	719.	584.	1672.	823.	1401.	1198.	1225.	1228.	1353.	1010.

TRIX ': % DIFFERENCE IN MULTIPLIERS: OBE/MRIO

COLUMN	21	22	23	24	25	26	27	28	29	30
OW										
1	289.	60.	80.	46.	59.	60.	89.	95.	47.	19.
2	904.	63.	180.	97.	111.	105.	84.	113.	52.	28.
3	24.	4.	10.	3.	7.	10.	10.	35.	54.	23.
4	64.	29.	46.	33.	42.	54.	57.	74.	47.	23.
5	6.	28.	14.	45.	90.	44.	15.	51.	43.	17.
6	67.	32.	50.	68.	58.	44.	17.	55.	72.	26.
7	14.	22.	17.	5.	12.	14.	16.	19.	36.	22.
8	37.	48.	45.	36.	33.	49.	304.	299.	120.	48.
9	41.	38.	24.	10.	16.	21.	29.	63.	40.	21.
10	132.	113.	114.	48.	65.	76.	72.	126.	125.	95.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	29.	23.	27.	23.	21.	15.	56.	51.	35.	29.
13	854.	1102.	2203.	822.	1410.	1464.	939.	657.	643.	375.
14	46.	26.	35.	12.	20.	15.	66.	66.	35.	8.
15	13.	11.	19.	14.	16.	6.	22.	27.	14.	8.
16	68.	5.	55.	24.	29.	32.	75.	105.	53.	84.
17	49.	6.	19.	67.	75.	24.	90.	297.	46.	132.
18	12.	24.	21.	25.	21.	47.	34.	35.	42.	26.
19	116.	119.	162.	836.	516.	226.	17.	85.	105.	42.
20	24.	4.	9.	3.	7.	9.	29.	33.	87.	43.
21	0.	152.	94.	196.	432.	108.	26.	27.	25.	13.
22	38727.	0.	828.	3031.	2397.	806.	1053.	1010.	2003.	645.
23	1933.	146154.	0.	1617.	2651.	31166.	1215.	1206.	2594.	1225.
24	83.	34.	38.	1.	3.	6.	52.	18.	38.	38.
25	62.	7.	15.	17.	0.	31.	24.	23.	6.	11.
26	345.	383.	344.	317.	415.	1.	438.	547.	433.	229.
27	52.	30.	37.	15.	15.	14.	2.	34.	45.	16.
28	78.	18.	31.	24.	28.	30.	499.	1.	114.	16.
29	92.	88.	134.	86.	108.	106.	1329.	214.	0.	178.
30	36.	3.	6.	47.	80.	18.	181.	475.	82.	0.
31	33.	47.	44.	36.	29.	49.	524.	420.	131.	44.
32	94.	12.	11.	33.	55.	22.	186.	676.	13.	278.
33	67.	10.	10.	19.	25.	32.	23.	41.	72.	29.
34	758.	125.	139.	135.	116.	56.	75.	105.	81.	35.
35	47.	7.	4.	40.	416.	43.	60.	84.	2.	55.
36	50.	63.	21.	164.	148.	115.	65.	133.	95.	103.
37	5.	26.	13.	63.	156.	69.	78.	109.	39.	17.
38	50.	27.	43.	105.	70.	58.	48.	90.	89.	23.
39	44.	20.	30.	42.	767.	42.	14.	37.	6.	2.
40	203.	580.	1647.	116.	116.	67.	114.	124.	161.	125.
41	46.	98.	44.	131.	818.	117.	122.	177.	31.	116.
42	27.	8.	29.	14.	25.	28.	23.	55.	47.	41.
43	53.	86.	113.	31.	38.	33.	61.	66.	33.	48.
44	539.	377.	1506.	136.	131.	81.	212.	132.	41.	91.
45	128.	177.	122.	54.	77.	86.	76.	95.	104.	77.
46	24.	56.	61.	21.	25.	29.	40.	49.	62.	40.
47	161.	97.	221.	92.	112.	112.	166.	187.	128.	144.
48	23.	44.	113.	11.	11.	10.	5.	40.	69.	26.
49	82.	152.	191.	20.	36.	84.	126.	125.	142.	107.
50	28.	52.	21.	62.	74.	59.	67.	96.	53.	42.
51	684.	662.	812.	585.	528.	451.	722.	579.	417.	502.
52	105.	189.	1579.	116.	88.	68.	131.	92.	43.	90.

TRIX : % DIFFERENCE IN MULTIPLIERS: OBE/MRIO

COLUMN	21	22	23	24	25	26	27	28	29	30
OW										
53	45.	96.	142.	65.	70.	62.	90.	125.	90.	74.
54	244.	537.	818.	219.	185.	124.	283.	242.	175.	128.
55	43.	54.	333.	46.	57.	67.	98.	93.	49.	89.
56	193.	321.	1187.	216.	163.	99.	242.	185.	320.	118.
57	410.	474.	1162.	111.	89.	97.	185.	163.	170.	78.
58	69.	90.	182.	98.	77.	67.	103.	83.	54.	66.
59	105.	169.	295.	89.	86.	72.	154.	127.	129.	104.
60	94.	339.	696.	119.	105.	281.	165.	170.	304.	198.
61	35.	115.	90.	29.	28.	40.	69.	63.	59.	40.
62	46.	273.	1319.	177.	93.	94.	179.	143.	883.	112.
63	44.	52.	76.	307.	148.	8.	94.	89.	59.	50.
64	352.	194.	205.	168.	122.	56.	305.	223.	297.	132.
65	9.	9.	14.	6.	7.	8.	24.	28.	19.	12.
66	21.	17.	19.	20.	17.	10.	32.	35.	47.	20.
67	319499.	374944.	319465.	404980.	380859.	241206.	508722.	589890.	1412380.	413082.
68	17.	16.	19.	9.	12.	13.	20.	34.	32.	23.
69	14.	8.	13.	8.	9.	9.	21.	23.	16.	9.
70	19.	12.	12.	13.	15.	14.	33.	33.	24.	17.
71	21.	10.	16.	18.	15.	4.	65.	52.	28.	21.
72	21.	23.	30.	17.	15.	13.	36.	40.	23.	11.
73	20.	11.	17.	12.	11.	7.	29.	23.	5.	13.
74	16.	11.	15.	11.	11.	9.	30.	33.	22.	15.
75	221.	279.	306.	311.	361.	219.	360.	421.	752.	214.
76	21.	14.	16.	16.	14.	7.	31.	31.	23.	14.
77	48.	36.	38.	55.	46.	8.	126.	92.	29.	47.
78	1336.	1302.	1329.	1038.	1247.	765.	1430.	1300.	1159.	1256.

ATRIX ': % DIFFERENCE IN MULTIPLIERS: OBE/MRIO

COLUMN / ROW	31	32	33	34	35	36	37	38	39	40
1	174.	46.	4.	8.	84.	54.	77.	65.	94.	69.
2	309.	43.	8.	16.	148.	61.	127.	94.	125.	110.
3	20.	37.	6.	9.	14.	17.	21.	15.	24.	50.
4	134.	39.	6.	13.	48.	41.	50.	43.	59.	59.
5	25.	55.	25.	43.	37.	10.	1.	46.	2.	16.
6	30.	71.	37.	58.	29.	72.	50.	1.	31.	20.
7	20.	27.	8.	19.	13.	5.	2.	21.	4.	18.
8	5.	136.	38.	53.	42.	44.	23.	26.	31.	38.
9	21.	62.	25.	43.	5.	8.	7.	12.	22.	29.
10	92.	128.	59.	99.	59.	132.	42.	180.	71.	93.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	7.	35.	17.	22.	24.	24.	15.	23.	19.	28.
13	944.	1609.	737.	814.	814.	837.	4578.	1976.	3047.	15562.
14	36.	51.	1.	4.	34.	25.	34.	31.	61.	30.
15	22.	17.	14.	12.	11.	13.	14.	15.	12.	16.
16	74.	17.	112.	15.	51.	33.	42.	20.	41.	63.
17	51.	17.	85.	5.	44.	23.	53.	18.	52.	64.
18	44.	99.	52.	84.	11.	15.	11.	18.	13.	19.
19	87.	140.	20.	11.	129:	9.	141.	169.	145.	255.
20	20.	35.	24.	8.	14.	16.	22.	14.	22.	54.
21	70.	26.	6.	10.	3.	20.	20.	21.	51.	11.
22	466.	4466.	1269.	452.	43921.	1021.	707.	1375.	821.	4646.
23	325.	2372.	1010.	3971.	1988.	985.	1098.	1152.	2992.	35043.
24	28.	54.	23.	22.	13.	14.	61.	37.	19.	49.
25	12.	14.	7.	6.	2.	12.	23.	25.	5.	16.
26	433.	504.	198.	345.	416.	394.	365.	394.	24.	382.
27	14.	36.	11.	31.	7.	26.	9.	16.	20.	27.
28	123.	16.	133.	20.	45.	25.	80.	10.	37.	63.
29	51.	239.	3.	10.	218.	25.	142.	152.	68.	65.
30	54.	91.	48.	54.	24.	67.	38.	58.	15.	8.
31	0.	176.	37.	55.	61.	50.	20.	25.	29.	35.
32	35.	1.	171.	8.	7.	57.	36.	49.	30.	110.
33	18.	485.	0.	1.	33.	12.	12.	14.	18.	32.
34	82.	1392.	1999.	0.	101.	85.	77.	70.	67.	50.
35	30.	16.	4.	20.	0.	77.	69.	107.	83.	7.
36	42.	508.	46.	130.	18.	1.	49.	21.	183.	63.
37	25.	67.	31.	45.	59.	21.	1.	134.	2.	16.
38	25.	98.	55.	61.	29.	38.	21.	0.	17.	17.
39	4.	50.	4.	19.	58.	43.	33.	37.	0.	137.
40	26.	191.	80.	134.	432.	67.	169.	159.	447.	0.
41	71.	401.	37.	143.	121.	75.	23.	79.	126.	49.
42	25.	46.	19.	15.	59.	11.	22.	46.	31.	24.
43	20.	76.	30.	45.	32.	17.	51.	119.	65.	492.
44	146.	127.	17.	51.	132.	341.	2317.	386.	826.	1198.
45	20.	138.	60.	115.	33.	8.	63.	16.	74.	638.
46	19.	48.	22.	31.	19.	12.	33.	22.	33.	387.
47	70.	93.	93.	114.	32.	130.	227.	19.	105.	60.
48	76.	76.	34.	44.	32.	115.	125.	82.	102.	457.
49	27.	155.	54.	121.	69.	40.	23.	29.	36.	105.
50	45.	49.	39.	57.	50.	31.	11.	15.	20.	76.
51	542.	607.	475.	470.	487.	606.	745.	801.	580.	1152.
52	41.	134.	111.	101.	117.	355.	40.	384.	55.	138.

ATRIX .: % DIFFERENCE IN MULTIPLIERS: OBE/MRIO

COLUMN / ROW	31	32	33	34	35	36	37	38	39	40
53	15.	227.	70.	105.	617.	143.	12.	49.	43.	39.
54	102.	753.	158.	304.	294.	320.	631.	949.	395.	2616.
55	30.	138.	42.	89.	66.	12.	122.	542.	125.	203.
56	111.	849.	348.	388.	412.	237.	327.	1428.	380.	909.
57	35.	374.	141.	183.	277.	172.	135.	484.	193.	241.
58	34.	81.	26.	49.	55.	35.	143.	1363.	123.	288.
59	59.	110.	49.	91.	76.	95.	607.	1183.	432.	834.
60	77.	1842.	124.	379.	187.	121.	156.	217.	1341.	1719.
61	35.	81.	27.	66.	53.	43.	56.	58.	47.	2264.
62	57.	298.	124.	476.	131.	91.	50.	203.	78.	36.
63	57.	204.	48.	465.	65.	53.	47.	64.	34.	53.
64	112.	291.	121.	29.	46.	85.	32.	51.	58.	98.
65	5.	19.	6.	10.	8.	5.	4.	8.	6.	15.
66	30.	30.	19.	19.	20.	16.	14.	16.	21.	19.
67	546865.	476877.	238756.	390445.	470958.	353021.	358230.	364015.	460016.	328335.
68	13.	24.	10.	16.	5.	7.	8.	7.	10.	19.
69	11.	16.	5.	7.	7.	9.	7.	8.	7.	15.
70	13.	23.	10.	11.	11.	11.	8.	11.	9.	18.
71	6.	28.	9.	13.	15.	16.	12.	13.	12.	16.
72	44.	24.	22.	23.	19.	21.	23.	26.	23.	14.
73	10.	17.	8.	9.	9.	10.	10.	13.	9.	18.
74	12.	22.	8.	12.	11.	7.	10.	16.	12.	19.
75	554.	321.	406.	348.	305.	288.	331.	291.	322.	250.
76	24.	21.	8.	11.	14.	12.	12.	15.	15.	17.
77	44.	55.	39.	20.	54.	54.	55.	63.	44.	50.
78	1721.	1279.	699.	1052.	2113.	1742.	1333.	1654.	1426.	1470.

TRIX : % DIFFERENCE IN MULTIPLIERS: OBE/MRIO

COLUMN	41	42	43	44	45	46	47	48	49	50
OW										
1	89.	69.	80.	46.	74.	85.	76.	87.	96.	64.
2	143.	110.	112.	80.	106.	106.	112.	133.	128.	90.
3	15.	47.	58.	28.	45.	68.	60.	27.	42.	39.
4	61.	65.	62.	42.	57.	65.	67.	66.	72.	56.
5	18.	58.	21.	11.	14.	25.	31.	25.	24.	18.
6	21.	45.	23.	37.	48.	48.	69.	43.	35.	23.
7	20.	52.	21.	13.	17.	29.	35.	28.	27.	22.
8	41.	75.	38.	35.	40.	49.	45.	35.	39.	39.
9	31.	40.	30.	27.	33.	52.	71.	45.	42.	42.
10	107.	115.	125.	97.	103.	129.	159.	131.	137.	125.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	32.	48.	38.	28.	32.	39.	38.	29.	39.	24.
13	38274.	6882.	49586.	5740.	5309.	6597.	4322.	14804.	4951.	3155.
14	40.	40.	46.	25.	39.	47.	38.	39.	62.	28.
15	21.	22.	27.	15.	19.	27.	20.	20.	24.	14.
16	77.	61.	84.	56.	67.	37.	117.	55.	92.	40.
17	88.	14.	120.	53.	64.	62.	199.	65.	131.	83.
18	19.	26.	29.	19.	25.	37.	23.	24.	27.	14.
19	528.	195.	269.	161.	377.	434.	463.	275.	397.	224.
20	13.	49.	62.	28.	48.	74.	65.	26.	41.	43.
21	19.	23.	25.	13.	21.	99.	52.	32.	37.	13.
22	3379.	13838.	7336.	2711.	2465.	2710.	4200.	3827.	3467.	2801.
23	37053.	31325.	9032.	25.	5473.	66570.	3843.	4983.	5882.	3433.
24	31.	100.	64.	60.	69.	82.	86.	76.	67.	60.
25	14.	13.	22.	17.	29.	44.	47.	45.	35.	20.
26	431.	449.	437.	417.	367.	376.	399.	352.	394.	378.
27	35.	29.	46.	31.	38.	50.	64.	48.	55.	41.
28	29.	60.	85.	41.	46.	43.	161.	63.	107.	78.
29	71.	97.	90.	74.	95.	116.	90.	58.	105.	69.
30	16.	11.	67.	11.	23.	29.	76.	51.	73.	71.
31	38.	81.	32.	31.	36.	43.	39.	28.	33.	36.
32	39.	40.	75.	14.	18.	16.	157.	59.	95.	70.
33	66.	33.	71.	2.	87.	87.	72.	9.	14.	32.
34	149.	16.	83.	114.	95.	136.	202.	128.	108.	63.
35	165.	50.	229.	85.	157.	232.	219.	198.	187.	272.
36	36.	23.	21.	30.	42.	83.	75.	55.	39.	43.
37	17.	58.	21.	11.	14.	24.	30.	25.	24.	17.
38	17.	42.	20.	29.	40.	42.	64.	38.	31.	20.
39	503.	57.	102.	49.	61.	69.	154.	82.	96.	101.
40	1770.	2354.	127.	375.	28.	141.	50.	41.	149.	960.
41	0.	83.	18.	11.	34.	40.	169.	42.	61.	48.
42	60.	1.	43.	50.	41.	141.	291.	33.	63.	24.
43	857.	320.	0.	4.	14.	118.	308.	28.	278.	224.
44	5587.	1324.	13873.	0.	26952.	6205.	4385.	5423.	2651.	662.
45	126.	602.	2018.	1489.	0.	8958.	600.	2898.	1721.	161.
46	73.	470.	19.	223.	1396.	0.	82.	1093.	1232.	88.
47	72.	70.	17.	19.	19.	65.	0.	86.	43.	30.
48	121.	634.	1532.	811.	962.	3631.	1941.	0.	4116.	849.
49	308.	295.	43.	5.	26.	43.	14.	22.	0.	192.
50	65.	97.	42.	6.	45.	19.	316.	126.	357.	C.
51	1083.	3439.	1814.	1436.	4826.	2112.	16515.	12136.	9471.	1679.
52	302.	1215.	542.	450.	531.	2636.	845.	610.	3162.	352.

MATRIX . : % DIFFERENCE IN MULTIPLIERS: OBE/MRIO

COLUMN	41	42	43	44	45	46	47	48	49	50
ROW										
53	79.	92.	31.	43.	20.	16.	16.	17.	47.	274.
54	1597.	3561.	1783.	155.	1728.	2419.	9041.	5153.	8456.	995.
55	158.	368.	256.	16.	222.	217.	244.	700.	155.	295.
56	2039.	1405.	10287.	2181.	1138.	1060.	965.	1487.	2334.	1235.
57	789.	221.	994.	518.	347.	957.	277.	273.	154.	3096.
58	526.	875.	46.	13.	99.	85.	495.	613.	622.	14.
59	5235.	1785.	515.	144.	1088.	3889.	3820.	1665.	3938.	1487.
60	1140.	2827.	18551.	1380.	3070.	1517.	589.	1337.	4287.	3858.
61	141.	592.	5379.	911.	2103.	868.	431.	2009.	1666.	1364.
62	669.	951.	84.	73.	327.	333.	565.	82.	68.	2046.
63	91.	92.	152.	54.	78.	93.	110.	361.	92.	88.
64	262.	136.	118.	416.	108.	147.	294.	150.	127.	108.
65	18.	32.	23.	12.	19.	25.	31.	23.	27.	17.
66	22.	34.	34.	23.	25.	29.	28.	25.	28.	23.
67	372622.	394226.	356960.	417925.	310536.	307930.	319552.	279741.	316736.	308964.
68	20.	32.	27.	17.	21.	34.	30.	27.	27.	19.
69	20.	25.	21.	11.	17.	23.	23.	17.	24.	17.
70	18.	28.	30.	13.	15.	28.	25.	22.	29.	15.
71	19.	28.	39.	20.	23.	27.	27.	12.	30.	15.
72	30.	33.	37.	21.	27.	35.	26.	29.	33.	23.
73	20.	25.	27.	11.	22.	27.	26.	23.	26.	18.
74	36.	34.	31.	18.	31.	35.	36.	26.	35.	22.
75	314.	287.	290.	317.	261.	289.	245.	252.	274.	221.
76	21.	26.	28.	15.	19.	23.	21.	19.	22.	17.
77	52.	60.	56.	37.	47.	50.	49.	43.	50.	42.
78	1444.	1549.	1071.	1215.	1259.	1502.	1749.	1549.	1433.	1716.

ATRIX : % DIFFERENCE IN MULTIPLIERS: OBE/MRIO

COLUMN / ROW	51	52	53	54	55	56	57	58	59	60
1	49.	110.	63.	71.	57.	60.	64.	72.	53.	46.
2	74.	142.	90.	87.	84.	83.	90.	91.	78.	64.
3	46.	46.	41.	32.	35.	24.	42.	46.	30.	39.
4	48.	76.	56.	53.	47.	47.	56.	55.	45.	43.
5	39.	41.	22.	23.	24.	47.	64.	40.	8.	23.
6	22.	36.	23.	23.	23.	37.	28.	12.	22.	15.
7	35.	43.	24.	24.	30.	38.	46.	34.	11.	25.
8	42.	65.	39.	57.	32.	47.	64.	67.	33.	32.
9	120.	47.	27.	29.	36.	44.	31.	33.	20.	39.
10	132.	146.	118.	120.	117.	131.	108.	111.	99.	162.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	21.	49.	33.	40.	34.	31.	36.	44.	21.	26.
13	2411.	9044.	27891.	6886.	2970.	321.	4986.	4630.	5550.	15594.
14	19.	79.	33.	42.	30.	28.	34.	43.	33.	21.
15	8.	36.	18.	23.	14.	14.	18.	22.	15.	10.
16	50.	77.	50.	26.	41.	30.	57.	45.	56.	30.
17	35.	39.	38.	34.	16.	34.	60.	46.	12.	49.
18	18.	42.	24.	33.	21.	19.	22.	31.	38.	16.
19	195.	380.	197.	227.	160.	156.	140.	363.	2.	138.
20	54.	45.	44.	31.	37.	23.	47.	53.	30.	43.
21	14.	14.	26.	9.	19.	15.	27.	60.	15.	18.
22	3295.	8455.	1686.	2725.	6878.	3.	5408.	6724.	423.	69.
23	97686.	8800.	5207.	7256.	3932.	4587.	4907.	3414.	275.	4.
24	56.	64.	30.	48.	30.	42.	34.	49.	61.	65.
25	25.	33.	28.	10.	6.	19.	21.	15.	19.	28.
26	344.	469.	220.	497.	470.	216.	416.	461.	446.	360.
27	36.	48.	31.	33.	29.	38.	23.	20.	30.	59.
28	33.	62.	33.	24.	16.	25.	32.	28.	29.	40.
29	78.	348.	125.	318.	116.	87.	131.	188.	111.	75.
30	30.	28.	21.	11.	13.	35.	48.	115.	6.	21.
31	38.	61.	35.	59.	26.	44.	68.	74.	30.	28.
32	12.	36.	27.	9.	11.	19.	21.	12.	10.	45.
33	63.	89.	51.	47.	58.	55.	76.	74.	48.	32.
34	55.	157.	91.	22.	88.	95.	88.	142.	107.	44.
35	20.	80.	57.	51.	9.	10.	5.	105.	3.	41.
36	332.	36.	17.	18.	43.	55.	30.	25.	28.	41.
37	39.	41.	21.	23.	32.	47.	68.	43.	8.	22.
38	19.	33.	21.	21.	21.	36.	27.	11.	17.	13.
39	63.	85.	57.	57.	58.	79.	73.	71.	49.	56.
40	195.	1459.	74.	1082.	1951.	416.	608.	373.	332.	361.
41	11.	27.	29.	30.	13.	11.	16.	49.	7.	18.
42	19.	41.	29.	16.	25.	23.	60.	43.	8.	23.
43	213.	156.	301.	323.	192.	228.	301.	280.	69.	570.
44	690.	1672.	1887.	3790.	482.	342.	466.	656.	1531.	437.
45	237.	312.	401.	175.	117.	201.	173.	133.	364.	376.
46	166.	839.	140.	577.	75.	215.	680.	114.	190.	335.
47	18.	76.	32.	30.	23.	21.	44.	27.	10.	12.
48	390.	960.	303.	300.	305.	359.	253.	1103.	249.	578.
49	88.	101.	36.	79.	90.	301.	869.	17.	30.	32.
50	117.	147.	131.	77.	64.	44.	132.	172.	11.	5.
51	0.	7596.	1594.	6812.	1127.	28.	1316.	1580.	1658.	459.
52	1849.	0.	3413.	13.	905.	903.	1154.	4278.	15.	304.

MATRIX 1 % DIFFERENCE IN MULTIPLIERS: OBE/MRIO

COLUMN	51	52	53	54	55	56	57	58	59	60
ROW										
53	22.	22.	1.	109.	62.	50.	1020.	101.	57.	59.
54	1013.	71884.	14016.	1.	3162.	2570.	4402.	10735.	2258.	975.
55	22.	42.	69.	16.	0.	88.	462.	43.	10.	99.
56	3203.	1541.	1154.	1556.	2143.	1.	5017.	12016.	57.	41.
57	6.	183.	69.	287.	1419.	5.	1.	303.	129.	25.
58	290.	14.	67.	135.	6.	46.	518.	0.	36.	28.
59	1532.	5179.	1582.	2463.	1646.	493.	585.	1820.	0.	751.
60	1891.	5348.	2583.	3314.	479.	1436.	3092.	907.	785.	1.
61	193.	745.	2890.	858.	204.	245.	224.	310.	216.	524.
62	774.	36.	789.	20.	690.	803.	1260.	1011.	25.	18.
63	96.	138.	202.	91.	119.	360.	466.	1349.	61.	18.
64	82.	96.	113.	20.	152.	164.	134.	104.	109.	142.
65	18.	35.	20.	21.	17.	20.	27.	23.	8.	15.
66	15.	40.	26.	40.	27.	20.	29.	34.	21.	15.
67	292684.	396643.	290034.	780896.	415855.	301892.	313133.	377450.	461792.	252143.
68	23.	40.	22.	24.	21.	24.	25.	24.	14.	17.
69	13.	26.	19.	17.	12.	13.	20.	18.	9.	14.
70	14.	39.	19.	29.	25.	22.	28.	29.	13.	18.
71	12.	39.	22.	29.	20.	16.	26.	30.	18.	19.
72	18.	55.	26.	42.	25.	26.	25.	29.	23.	12.
73	13.	47.	28.	12.	15.	13.	24.	30.	11.	12.
74	19.	48.	25.	32.	23.	16.	26.	42.	3.	14.
75	181.	331.	215.	461.	244.	258.	223.	236.	321.	227.
76	12.	32.	20.	29.	19.	13.	22.	27.	16.	10.
77	29.	70.	54.	39.	50.	32.	52.	68.	35.	32.
78	1047.	1484.	1345.	1254.	1382.	1146.	1391.	1218.	1216.	1152.

ATRIX : % DIFFERENCE IN MULTIPLIERS: OBE/MRIO

ROW \ COLUMN	61	62	63	64	65	66	67	68	69	70
1	61.	43.	63.	62.	58.	64.	34.	134.	231.	76.
2	119.	35.	84.	49.	211.	107.	65.	224.	329.	128.
3	4.	57.	24.	6.	22.	12.	27.	80.	97.	28.
4	38.	35.	49.	33.	99.	59.	47.	144.	16.	82.
5	12.	34.	31.	23.	16.	34.	52.	199.	191.	67.
6	18.	21.	14.	12.	31.	25.	47.	134.	216.	67.
7	14.	38.	17.	23.	51.	17.	25.	10.	51.	21.
8	33.	58.	99.	53.	10.	12.	30.	12.	24.	26.
9	23.	46.	34.	27.	25.	10.	34.	86.	90.	36.
10	100.	151.	85.	121.	116.	127.	116.	287.	265.	138.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	24.	37.	29.	25.	16.	2.	10.	73.	21.	16.
13	4655.	14963.	24030.	1789.	1779.	301.	174.	657.	1648.	233.
14	27.	23.	33.	45.	13.	14.	8.	51.	179.	15.
15	11.	17.	13.	13.	11.	5.	3.	35.	24.	6.
16	39.	9.	33.	11.	39.	33.	71.	137.	281.	65.
17	7.	56.	47.	15.	16.	38.	63.	113.	129.	66.
18	17.	37.	22.	24.	18.	11.	56.	35.	527.	75.
19	9.	316.	97.	339.	45.	53.	58.	250.	305.	94.
20	3.	65.	28.	6.	23.	12.	46.	82.	89.	30.
21	56.	23.	74.	42.	59.	46.	43.	139.	22.	77.
22	7.	11783.	3962.	35.	91.	11.	41.	603.	2817.	174.
23	17.	4914.	5159.	4160.	99.	290.	1044.	322.	6584.	1809.
24	41.	72.	15.	21.	54.	36.	95.	164.	35.	26.
25	23.	23.	15.	9.	22.	31.	43.	107.	16.	48.
26	367.	461.	498.	597.	185.	146.	265.	519.	362.	82.
27	31.	52.	10.	36.	37.	37.	28.	104.	135.	55.
28	23.	44.	95.	12.	35.	34.	80.	143.	97.	63.
29	89.	749.	255.	337.	63.	52.	39.	174.	218.	32.
30	9.	42.	123.	10.	19.	6.	23.	75.	80.	28.
31	29.	57.	120.	53.	4.	7.	30.	33.	18.	24.
32	15.	41.	18.	25.	8.	11.	30.	67.	67.	36.
33	40.	25.	13.	18.	56.	41.	17.	137.	182.	46.
34	75.	31.	5.	97.	63.	33.	9.	85.	134.	38.
35	11.	31.	34.	9.	16.	11.	23.	75.	61.	30.
36	20.	49.	36.	37.	35.	20.	48.	106.	211.	62.
37	12.	33.	38.	21.	14.	30.	49.	155.	187.	57.
38	14.	19.	12.	9.	24.	20.	40.	101.	197.	54.
39	36.	17.	39.	50.	17.	17.	19.	72.	149.	33.
40	9.	457.	271.	384.	28.	12.	36.	77.	329.	41.
41	28.	25.	46.	51.	28.	22.	47.	109.	130.	65.
42	15.	42.	29.	19.	12.	20.	40.	79.	112.	42.
43	15.	252.	94.	139.	8.	30.	20.	39.	100.	16.
44	6531.	342.	223.	702.	202.	64.	33.	243.	177.	27.
45	80.	203.	82.	120.	66.	31.	60.	28.	416.	55.
46	108.	148.	92.	183.	34.	17.	48.	90.	285.	50.
47	30.	51.	177.	130.	21.	36.	63.	93.	276.	69.
48	315.	444.	86.	102.	194.	176.	187.	272.	733.	126.
49	7.	121.	184.	368.	26.	78.	111.	78.	454.	89.
50	24.	150.	39.	59.	15.	21.	46.	68.	143.	46.
51	3617.	995.	623.	588.	491.	201.	369.	583.	775.	282.
52	51.	3137.	1511.	110.	42.	28.	30.	89.	176.	21.

ATRIX : % DIFFERENCE IN MULTIPLIERS: OBE/MRIO

COLUMN / ROW	61	62	63	64	65	66	67	68	69	70
53	8.	84.	49.	55.	22.	40.	43.	56.	194.	38.
54	25.	1756.	5420.	1958.	94.	63.	61.	133.	394.	85.
55	22.	62.	244.	65.	28.	30.	55.	55.	66.	50.
56	380.	15562.	3511.	480.	91.	2.	6.	162.	246.	38.
57	198.	83.	545.	27.	21.	9.	26.	99.	298.	80.
58	64.	119.	204.	139.	5.	10.	26.	66.	61.	23.
59	93.	2098.	342.	411.	12.	16.	49.	107.	49.	38.
60	2966.	2036.	2069.	1431.	6.	467.	169.	118.	1164.	163.
61	0.	1571.	106.	912.	2.	63.	39.	81.	171.	51.
62	86.	0.	2575.	322.	54.	86.	113.	113.	659.	65.
63	61.	120.	0.	41.	41.	23.	4.	86.	129.	15.
64	159.	143.	179.	0.	64.	30.	28.	125.	156.	28.
65	10.	26.	16.	13.	0.	8.	8.	25.	22.	12.
66	21.	27.	20.	22.	8.	0.	3.	45.	14.	7.
67	359393.	491788.	435454.	490503.	212571.	229736.	0.	567589.	470314.	95643.
68	15.	30.	21.	19.	31.	5.	6.	2.	11.	7.
69	10.	21.	12.	9.	6.	6.	9.	43.	0.	14.
70	15.	25.	19.	17.	7.	6.	8.	35.	10.	0.
71	16.	26.	18.	16.	6.	4.	3.	23.	5.	4.
72	19.	28.	21.	23.	25.	16.	13.	63.	19.	32.
73	14.	16.	12.	11.	10.	4.	4.	36.	7.	3.
74	16.	30.	17.	16.	2.	1.	10.	30.	5.	8.
75	221.	304.	303.	326.	348.	147.	1.	501.	129.	439.
76	16.	23.	15.	16.	8.	5.	6.	51.	13.	1.
77	41.	39.	36.	31.	33.	9.	37.	424.	99.	8.
78	1224.	1122.	1070.	1226.	1829.	444.	989.	35539.	1009.	1353.

MATRIX : % DIFFERENCE IN MULTIPLIERS: OBE/MRIO

ROW \ COLUMN	71	72	73	74	75	76	77	78
1	3728.	61.	104.	106.	38.	40.	54.	84.
2	3366.	81.	148.	150.	93.	60.	104.	122.
3	35.	19.	267.	42.	22.	17.	19.	7.
4	725.	56.	127.	40.	60.	47.	67.	33.
5	118.	39.	122.	19.	41.	44.	26.	21.
6	113.	29.	140.	28.	35.	43.	40.	25.
7	164.	21.	90.	37.	31.	13.	1.	3.
8	261.	21.	80.	21.	40.	23.	14.	11.
9	35.	18.	179.	20.	26.	19.	23.	7.
10	331.	108.	377.	124.	95.	115.	117.	54.
11	0.	0.	0.	0.	0.	0.	0.	0.
12	5.	8.	76.	41.	6.	6.	9.	2.
13	1916.	194.	655.	2240.	300.	337.	196.	786.
14	387.	17.	50.	45.	11.	7.	11.	29.
15	171.	6.	32.	12.	4.	5.	4.	14.
16	471.	22.	258.	45.	63.	51.	34.	52.
17	208.	19.	358.	21.	53.	39.	11.	37.
18	502.	7.	196.	31.	72.	44.	53.	22.
19	522.	3.	246.	9.	65.	12.	4.	21.
20	27.	22.	400.	44.	30.	20.	21.	6.
21	616.	35.	128.	24.	57.	40.	54.	67.
22	2277.	172.	480.	1235.	183.	384.	216.	385.
23	360.	782.	6399.	1065.	762.	631.	170.	99.
24	197.	29.	612.	50.	67.	25.	29.	38.
25	183.	11.	254.	17.	38.	20.	26.	30.
26	695.	296.	1845.	365.	135.	41.	128.	334.
27	106.	26.	179.	34.	14.	33.	34.	12.
28	156.	31.	348.	24.	85.	54.	28.	47.
29	709.	3.	23.	121.	67.	2.	14.	61.
30	11.	15.	109.	5.	17.	13.	15.	4.
31	215.	16.	80.	13.	39.	21.	8.	13.
32	71.	12.	168.	5.	32.	16.	9.	17.
33	601.	2.	157.	87.	12.	34.	25.	49.
34	697.	1.	130.	104.	6.	25.	15.	66.
35	65.	11.	87.	2.	26.	10.	14.	9.
36	46.	10.	106.	8.	38.	33.	29.	9.
37	72.	39.	102.	18.	46.	38.	21.	19.
38	62.	25.	115.	23.	31.	33.	30.	20.
39	110.	19.	92.	29.	22.	11.	20.	13.
40	20.	62.	170.	203.	26.	21.	26.	7.
41	170.	32.	111.	6.	58.	36.	20.	37.
42	59.	15.	148.	9.	35.	30.	19.	14.
43	157.	53.	7.	12.	26.	34.	10.	22.
44	751.	149.	8.	413.	51.	67.	89.	102.
45	90.	67.	51.	160.	58.	44.	12.	14.
46	32.	93.	225.	104.	35.	26.	33.	9.
47	328.	55.	44.	23.	95.	72.	31.	46.
48	1534.	110.	722.	268.	124.	129.	136.	80.
49	157.	154.	116.	51.	104.	83.	42.	35.
50	226.	38.	65.	3.	43.	38.	17.	23.
51	2294.	562.	379.	750.	440.	415.	398.	418.
52	36.	47.	9.	53.	36.	47.	21.	14.

ATRIX : % DIFFERENCE IN MULTIPLIERS: OBE/MRIO

ROW \ COLUMN	71	72	73	74	75	76	77	78
53	144.	49.	20.	39.	49.	59.	32.	24.
54	93.	6.	346.	645.	88.	56.	35.	34.
55	22.	65.	143.	15.	49.	28.	17.	4.
56	276.	557.	235.	205.	86.	162.	76.	84.
57	660.	2.	261.	188.	104.	49.	38.	111.
58	157.	25.	24.	3.	29.	21.	10.	15.
59	355.	43.	105.	2.	49.	40.	8.	33.
60	984.	393.	433.	608.	180.	198.	18.	157.
61	567.	28.	52.	158.	58.	70.	6.	16.
62	108.	110.	144.	94.	133.	4.	52.	24.
63	236.	3.	52.	98.	1.	8.	28.	35.
64	127.	4.	241.	116.	12.	20.	51.	40.
65	99.	10.	61.	11.	10.	9.	1.	7.
66	99.	11.	172.	10.	16.	7.	18.	17.
67	606038.	159341.	6683475.	295806.	224558.	438.	552758.	330916.
68	99.	7.	40.	19.	8.	4.	7.	3.
69	123.	7.	64.	2.	11.	9.	8.	7.
70	66.	8.	88.	7.	11.	17.	12.	6.
71	1.	3.	49.	5.	2.	2.	4.	11.
72	614.	0.	201.	18.	15.	7.	13.	36.
73	79.	6.	2.	11.	5.	8.	5.	5.
74	132.	3.	28.	0.	9.	5.	3.	6.
75	2916.	182.	3516.	234.	0.	56.	213.	545.
76	168.	4.	48.	12.	6.	0.	13.	6.
77	42.	21.	22.	50.	83.	12.	0.	76.
78	6659.	625.	972.	2727.	972.	800.	965.	2.

ATRIX : % DIFFERENCE IN MULTIPLIERS: RAS/MRIO

ROW \ COLUMN	1	2	3	4	5	6	7	8	9	10
1	1.	8.	47.	52.	26.	23.	22.	18.	30.	23.
2	5.	1.	44.	58.	27.	24.	24.	20.	32.	25.
3	8.	21.	0.	68.	15.	10.	8.	15.	32.	21.
4	9.	8.	26.	0.	31.	30.	28.	26.	37.	29.
5	28.	29.	41.	87.	0.	16.	16.	20.	26.	15.
6	35.	31.	51.	91.	8.	1.	28.	26.	35.	22.
7	17.	25.	42.	78.	6.	13.	0.	20.	20.	14.
8	12.	10.	27.	70.	17.	19.	15.	0.	21.	18.
9	10.	5.	40.	73.	6.	18.	16.	11.	0.	5.
10	17.	11.	60.	86.	26.	24.	25.	26.	36.	0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	8.	9.	38.	66.	16.	12.	11.	7.	19.	13.
13	0.	4.	4.	30.	-2.	-6.	-7.	-9.	-0.	3.
14	2.	14.	24.	52.	20.	17.	15.	12.	24.	18.
15	18.	23.	23.	54.	16.	10.	10.	8.	18.	13.
16	28.	25.	28.	59.	23.	16.	19.	22.	25.	13.
17	25.	24.	16.	44.	15.	12.	12.	9.	17.	17.
18	14.	24.	29.	62.	18.	17.	17.	15.	26.	18.
19	2.	2.	20.	53.	16.	16.	12.	13.	18.	16.
20	20.	19.	48.	68.	10.	5.	5.	12.	29.	17.
21	13.	6.	69.	47.	22.	20.	18.	19.	27.	20.
22	22.	25.	25.	75.	20.	13.	10.	15.	31.	17.
23	12.	10.	25.	69.	18.	14.	11.	10.	23.	16.
24	31.	48.	64.	71.	42.	38.	35.	36.	37.	28.
25	21.	40.	54.	47.	22.	21.	18.	20.	26.	21.
26	31.	43.	53.	96.	46.	38.	39.	38.	49.	39.
27	12.	7.	44.	74.	11.	8.	10.	11.	20.	9.
28	22.	24.	29.	61.	20.	18.	16.	19.	22.	21.
29	0.	17.	31.	56.	28.	22.	22.	20.	29.	12.
30	11.	13.	21.	72.	18.	15.	13.	7.	22.	16.
31	6.	4.	21.	59.	8.	9.	6.	7.	12.	8.
32	7.	7.	30.	66.	7.	5.	4.	9.	10.	9.
33	14.	21.	49.	55.	21.	19.	19.	18.	27.	20.
34	10.	39.	53.	49.	19.	13.	15.	11.	20.	14.
35	4.	15.	28.	59.	19.	16.	13.	13.	21.	17.
36	11.	8.	32.	73.	7.	10.	9.	5.	15.	12.
37	20.	24.	32.	76.	9.	9.	9.	12.	18.	8.
38	30.	31.	42.	80.	18.	22.	21.	20.	27.	14.
39	5.	14.	18.	59.	23.	23.	22.	17.	30.	23.
40	10.	11.	27.	70.	13.	6.	12.	5.	15.	8.
41	6.	18.	34.	72.	19.	18.	16.	18.	24.	18.
42	30.	35.	34.	46.	12.	9.	6.	9.	18.	12.
43	19.	14.	28.	82.	3.	2.	1.	3.	8.	2.
44	5.	1.	53.	62.	50.	50.	49.	47.	60.	51.
45	18.	17.	41.	83.	3.	2.	2.	3.	9.	2.
46	13.	14.	40.	72.	11.	3.	8.	10.	9.	3.
47	29.	28.	42.	79.	13.	16.	10.	21.	26.	18.
48	27.	28.	43.	73.	29.	27.	26.	30.	38.	28.
49	19.	14.	29.	83.	17.	15.	13.	6.	13.	11.
50	16.	15.	36.	84.	19.	8.	9.	20.	18.	11.
51	62.	62.	96.	143.	63.	64.	62.	60.	76.	66.
52	22.	23.	43.	88.	27.	22.	20.	11.	27.	22.

ATRIX 5:· % DIFFERENCE IN MULTIPLIERS: RAS/MRIO

COLUMN	1	2	3	4	5	6	7	8	9	10
ROW										
53	27.	26.	32.	81.	20.	14.	6.	2.	14.	4.
54	12.	14.	26.	61.	18.	13.	12.	9.	21.	15.
55	12.	13.	18.	74.	14.	9.	3.	11.	15.	6.
56	16.	19.	32.	65.	17.	10.	15.	7.	24.	15.
57	23.	29.	39.	75.	22.	23.	23.	8.	32.	21.
58	6.	5.	22.	62.	12.	12.	10.	10.	15.	11.
59	7.	8.	26.	63.	8.	6.	5.	8.	12.	7.
60	15.	23.	35.	59.	13.	16.	16.	14.	25.	14.
61	11.	12.	18.	65.	10.	4.	3.	12.	21.	7.
62	14.	20.	24.	72.	12.	10.	19.	8.	27.	20.
63	36.	42.	49.	87.	40.	32.	32.	31.	42.	34.
64	19.	24.	29.	65.	24.	9.	18.	15.	26.	19.
65	5.	12.	23.	55.	5.	8.	7.	5.	16.	5.
66	8.	11.	36.	66.	15.	13.	12.	13.	24.	8.
67	77.	92.	140.	172.	94.	89.	88.	91.	110.	84.
68	9.	11.	36.	67.	6.	5.	4.	6.	12.	4.
69	4.	7.	23.	53.	9.	8.	6.	7.	14.	7.
70	6.	6.	30.	57.	10.	5.	5.	7.	12.	7.
71	6.	3.	38.	52.	4.	5.	4.	1.	13.	7.
72	12.	21.	24.	54.	16.	11.	11.	8.	18.	13.
73	7.	6.	33.	64.	7.	10.	8.	8.	17.	10.
74	3.	3.	19.	55.	9.	7.	4.	3.	9.	7.
75	81.	89.	94.	142.	82.	74.	73.	69.	85.	77.
76	1.	10.	37.	56.	11.	8.	7.	9.	20.	5.
77	14.	18.	32.	63.	13.	8.	9.	10.	19.	4.
78	9.	16.	23.	62.	6.	4.	5.	4.	9.	2.

MATRIX : % DIFFERENCE IN MULTIPLIERS: RAS/MRIO

COLUMN	11	12	13	14	15	16	17	18	19	20
ROW										
1	21.	18.	58.	5.	14.	13.	12.	16.	47.	43.
2	11.	20.	61.	8.	6.	8.	16.	11.	45.	39.
3	5.	6.	50.	3.	24.	29.	32.	1.	51.	4.
4	23.	26.	71.	14.	14.	17.	23.	20.	56.	30.
5	14.	16.	51.	20.	33.	37.	49.	38.	77.	26.
6	16.	17.	51.	33.	38.	39.	50.	37.	76.	34.
7	12.	16.	51.	14.	18.	16.	27.	19.	55.	21.
8	13.	10.	61.	17.	18.	23.	31.	24.	61.	22.
9	5.	4.	59.	13.	14.	19.	32.	23.	60.	17.
10	25.	28.	79.	20.	22.	30.	45.	34.	77.	32.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	17.	0.	56.	13.	15.	16.	23.	17.	51.	16.
13	-13.	-9.	0.	-3.	-6.	-2.	4.	-7.	21.	-2.
14	16.	12.	51.	1.	17.	15.	16.	15.	49.	24.
15	13.	8.	45.	15.	-0.	16.	23.	11.	44.	16.
16	13.	17.	55.	24.	29.	1.	10.	3.	34.	24.
17	5.	13.	49.	24.	28.	-0.	0.	4.	29.	21.
18	8.	6.	43.	6.	20.	14.	9.	0.	34.	8.
19	7.	11.	52.	3.	9.	8.	6.	1.	2.	21.
20	2.	3.	45.	20.	21.	28.	33.	23.	45.	1.
21	15.	14.	38.	7.	6.	15.	25.	18.	53.	27.
22	2.	12.	48.	23.	29.	25.	19.	10.	53.	27.
23	2.	2.	48.	17.	18.	20.	28.	22.	57.	23.
24	28.	27.	78.	22.	22.	29.	33.	28.	66.	36.
25	14.	14.	49.	5.	3.	9.	14.	6.	37.	18.
26	46.	39.	78.	26.	23.	43.	51.	38.	80.	43.
27	18.	15.	60.	16.	17.	16.	28.	20.	57.	17.
28	15.	12.	53.	15.	3.	4.	10.	6.	39.	17.
29	17.	14.	56.	4.	9.	5.	12.	7.	42.	21.
30	5.	1.	58.	11.	19.	13.	25.	15.	51.	7.
31	6.	4.	49.	9.	11.	13.	20.	14.	49.	14.
32	7.	6.	39.	7.	16.	10.	11.	11.	34.	17.
33	12.	14.	47.	13.	18.	14.	20.	2.	49.	10.
34	16.	13.	49.	15.	19.	24.	22.	13.	48.	28.
35	8.	3.	62.	2.	21.	4.	16.	7.	40.	9.
36	1.	2.	58.	14.	17.	21.	31.	21.	58.	8.
37	8.	9.	43.	11.	23.	30.	37.	27.	60.	18.
38	9.	10.	43.	25.	31.	35.	40.	26.	58.	26.
39	17.	8.	66.	2.	7.	25.	32.	26.	66.	21.
40	0.	1.	60.	15.	18.	19.	26.	20.	55.	19.
41	11.	12.	51.	5.	26.	27.	28.	20.	59.	16.
42	5.	4.	43.	16.	7.	29.	32.	17.	52.	8.
43	14.	17.	69.	25.	30.	27.	38.	32.	71.	27.
44	35.	35.	97.	11.	9.	11.	23.	18.	53.	53.
45	4.	3.	58.	21.	26.	25.	37.	28.	66.	24.
46	2.	2.	46.	11.	15.	12.	21.	10.	45.	9.
47	17.	19.	46.	27.	33.	31.	41.	33.	70.	30.
48	21.	23.	71.	15.	31.	8.	17.	11.	46.	10.
49	9.	9.	45.	21.	25.	24.	32.	24.	66.	25.
50	18.	19.	51.	19.	26.	30.	39.	29.	65.	25.
51	59.	60.	76.	61.	59.	68.	78.	62.	112.	66.
52	-0.	-1.	73.	31.	35.	35.	44.	35.	76.	33.

TRIX : % DIFFERENCE IN MULTIPLIERS: RAS/MRIO

COLUMN	11	12	13	14	15	16	17	18	19	20
OW										
53	7.	8.	40.	29.	36.	30.	39.	29.	73.	29.
54	3.	2.	49.	14.	13.	18.	25.	15.	48.	19.
55	2.	3.	54.	17.	22.	22.	28.	19.	57.	22.
56	5.	5.	38.	18.	20.	20.	27.	15.	50.	19.
57	20.	18.	44.	20.	22.	28.	31.	21.	58.	28.
58	9.	8.	37.	11.	16.	16.	24.	18.	52.	17.
59	9.	8.	50.	10.	16.	17.	24.	16.	50.	14.
60	16.	15.	40.	15.	22.	20.	26.	20.	56.	19.
61	14.	14.	59.	13.	20.	18.	24.	18.	54.	21.
62	6.	5.	41.	14.	16.	12.	20.	8.	42.	13.
63	33.	31.	41.	32.	31.	29.	39.	21.	61.	28.
64	10.	4.	51.	19.	25.	14.	9.	2.	39.	20.
65	7.	7.	48.	6.	11.	11.	16.	11.	44.	10.
66	12.	8.	41.	11.	19.	14.	20.	9.	42.	13.
67	92.	87.	150.	87.	105.	101.	107.	93.	152.	100.
68	12.	10.	48.	10.	17.	12.	21.	12.	46.	12.
69	4.	3.	44.	5.	9.	7.	12.	6.	37.	10.
70	9.	6.	45.	8.	11.	12.	18.	9.	41.	10.
71	13.	10.	50.	11.	12.	12.	19.	9.	43.	14.
72	12.	8.	41.	6.	5.	13.	18.	10.	40.	16.
73	5.	8.	43.	6.	3.	12.	19.	9.	43.	11.
74	6.	3.	43.	6.	12.	12.	18.	11.	43.	9.
75	76.	70.	128.	79.	76.	81.	91.	74.	125.	82.
76	10.	7.	43.	7.	17.	15.	18.	10.	44.	14.
77	18.	12.	42.	15.	10.	13.	18.	4.	38.	15.
78	6.	4.	48.	6.	20.	11.	18.	12.	42.	10.

MATRIX : % DIFFERENCE IN MULTIPLIERS: RAS/MRIO

COLUMN / ROW	21	22	23	24	25	26	27	28	29	30
1	40.	20.	26.	17.	27.	17.	32.	39.	19.	14.
2	37.	16.	28.	19.	29.	20.	33.	43.	22.	18.
3	15.	8.	13.	9.	20.	20.	22.	39.	24.	25.
4	42.	29.	38.	31.	40.	32.	44.	52.	30.	26.
5	19.	20.	18.	33.	38.	34.	25.	44.	31.	24.
6	37.	24.	26.	35.	27.	32.	25.	44.	38.	26.
7	19.	18.	17.	7.	19.	20.	24.	25.	27.	24.
8	29.	25.	29.	20.	19.	23.	35.	43.	31.	15.
9	24.	21.	19.	8.	19.	21.	25.	40.	21.	13.
10	38.	37.	40.	16.	27.	26.	19.	37.	28.	28.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	23.	19.	23.	16.	16.	15.	31.	33.	26.	21.
13	-1.	-5.	-0.	-4.	-3.	-11.	8.	10.	2.	-6.
14	26.	17.	23.	11.	20.	12.	26.	32.	14.	9.
15	17.	13.	18.	14.	15.	5.	27.	30.	21.	11.
16	25.	6.	17.	8.	19.	17.	41.	38.	24.	26.
17	32.	3.	8.	9.	20.	5.	42.	45.	19.	32.
18	14.	8.	13.	9.	7.	18.	25.	25.	16.	13.
19	26.	9.	16.	17.	21.	13.	20.	37.	22.	20.
20	11.	5.	10.	6.	17.	17.	29.	37.	30.	31.
21	0.	14.	15.	19.	19.	22.	24.	23.	15.	12.
22	32.	0.	10.	25.	25.	17.	42.	45.	39.	27.
23	29.	24.	0.	21.	22.	20.	37.	39.	34.	26.
24	40.	29.	33.	3.	15.	17.	42.	37.	31.	37.
25	17.	7.	11.	5.	0.	11.	23.	23.	9.	10.
26	48.	41.	45.	32.	33.	2.	59.	65.	43.	37.
27	28.	22.	28.	13.	16.	12.	4.	20.	15.	12.
28	29.	12.	20.	9.	11.	14.	28.	0.	22.	6.
29	24.	16.	23.	10.	19.	16.	27.	19.	0.	7.
30	19.	4.	9.	17.	22.	7.	25.	37.	18.	0.
31	21.	16.	19.	10.	10.	13.	26.	31.	20.	8.
32	25.	5.	10.	7.	16.	9.	35.	33.	9.	21.
33	15.	5.	10.	9.	15.	14.	23.	29.	23.	19.
34	23.	20.	24.	17.	16.	8.	31.	33.	21.	13.
35	21.	5.	9.	15.	23.	16.	25.	34.	8.	16.
36	20.	17.	12.	12.	21.	21.	25.	40.	17.	12.
37	13.	12.	12.	25.	31.	28.	28.	42.	21.	13.
38	29.	16.	19.	30.	16.	24.	26.	44.	34.	15.
39	32.	16.	21.	23.	29.	22.	21.	30.	10.	6.
40	26.	22.	25.	19.	20.	18.	34.	39.	30.	25.
41	18.	13.	12.	25.	30.	24.	38.	49.	13.	19.
42	16.	4.	10.	7.	12.	15.	24.	38.	14.	23.
43	30.	32.	33.	21.	28.	32.	34.	46.	47.	33.
44	61.	35.	55.	44.	50.	44.	63.	69.	50.	41.
45	26.	25.	24.	15.	25.	26.	26.	37.	36.	27.
46	14.	12.	17.	9.	14.	14.	23.	30.	23.	20.
47	34.	26.	30.	29.	32.	33.	42.	57.	41.	32.
48	16.	18.	26.	12.	13.	10.	23.	42.	34.	32.
49	26.	26.	21.	11.	22.	24.	34.	43.	40.	30.
50	25.	24.	18.	28.	29.	26.	37.	51.	32.	27.
51	74.	65.	71.	66.	64.	56.	88.	88.	69.	69.
52	32.	35.	33.	34.	35.	33.	50.	55.	47.	38.

MATRIX . % DIFFERENCE IN MULTIPLIERS: RAS/MRIO

COLUMN	21	22	23	24	25	26	27	28	29	30
ROW										
53	26.	27.	24.	29.	32.	30.	30.	49.	45.	30.
54	22.	17.	22.	16.	16.	10.	31.	33.	22.	15.
55	32.	22.	16.	22.	26.	22.	36.	41.	19.	27.
56	23.	18.	22.	19.	18.	10.	33.	35.	28.	18.
57	30.	26.	31.	23.	22.	17.	42.	45.	32.	22.
58	23.	19.	23.	18.	18.	16.	35.	40.	36.	24.
59	21.	16.	20.	16.	16.	12.	32.	36.	28.	21.
60	24.	20.	25.	18.	18.	19.	35.	38.	28.	23.
61	26.	21.	25.	17.	18.	19.	32.	36.	30.	22.
62	18.	12.	18.	15.	13.	11.	34.	34.	17.	21.
63	30.	27.	32.	30.	28.	3.	52.	55.	47.	34.
64	22.	14.	20.	19.	18.	6.	37.	40.	34.	21.
65	15.	11.	16.	9.	9.	10.	24.	27.	18.	14.
66	18.	12.	15.	13.	10.	5.	27.	28.	22.	15.
67	109.	98.	104.	99.	96.	85.	126.	128.	116.	102.
68	17.	14.	17.	9.	14.	14.	22.	29.	25.	21.
69	15.	9.	13.	9.	10.	8.	24.	25.	15.	10.
70	17.	10.	13.	11.	13.	8.	26.	27.	19.	14.
71	18.	10.	16.	14.	12.	3.	30.	31.	25.	16.
72	16.	11.	16.	9.	8.	4.	25.	27.	13.	8.
73	18.	11.	16.	11.	10.	6.	25.	24.	10.	13.
74	16.	11.	15.	12.	11.	7.	27.	31.	26.	15.
75	85.	77.	85.	79.	81.	66.	100.	104.	90.	75.
76	19.	13.	17.	14.	12.	6.	29.	30.	23.	15.
77	19.	12.	15.	14.	14.	-2.	31.	35.	26.	16.
78	17.	14.	17.	8.	14.	7.	22.	26.	23.	17.

MATRIX : % DIFFERENCE IN MULTIPLIERS: RAS/MRIO

COLUMN / ROW	31	32	33	34	35	36	37	38	39	40
1	21.	25.	7.	11.	24.	22.	24.	23.	22.	29.
2	24.	24.	11.	15.	25.	20.	26.	24.	25.	31.
3	20.	29.	8.	11.	10.	17.	16.	17.	22.	25.
4	30.	35.	16.	22.	32.	30.	29.	30.	30.	38.
5	24.	38.	27.	30.	25.	12.	6.	14.	10.	19.
6	24.	43.	32.	35.	21.	26.	15.	8.	16.	22.
7	17.	25.	8.	18.	16.	6.	3.	15.	7.	17.
8	5.	36.	18.	25.	24.	20.	19.	21.	21.	30.
9	7.	21.	17.	23.	6.	6.	7.	10.	12.	21.
10	25.	42.	18.	33.	19.	12.	14.	32.	24.	34.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	9.	26.	15.	19.	15.	15.	11.	16.	16.	24.
13	-3.	1.	-3.	-5.	-6.	-5.	-4.	-4.	-4.	-0.
14	15.	27.	4.	8.	18.	16.	18.	18.	17.	23.
15	15.	19.	14.	13.	12.	12.	13.	14.	13.	18.
16	24.	12.	28.	8.	16.	15.	17.	11.	19.	26.
17	17.	6.	26.	3.	14.	8.	19.	6.	20.	22.
18	11.	14.	12.	5.	6.	8.	7.	9.	8.	15.
19	18.	16.	7.	3.	15.	4.	17.	17.	19.	23.
20	16.	22.	17.	8.	7.	13.	12.	12.	18.	21.
21	20.	16.	8.	7.	4.	9.	10.	10.	10.	13.
22	21.	29.	24.	13.	20.	20.	18.	21.	23.	31.
23	13.	32.	19.	24.	20.	19.	16.	20.	21.	30.
24	25.	38.	27.	26.	21.	24.	36.	33.	30.	38.
25	7.	12.	8.	6.	3.	9.	14.	14.	4.	16.
26	40.	53.	32.	38.	40.	41.	39.	43.	23.	49.
27	10.	25.	10.	22.	11.	15.	11.	16.	16.	25.
28	24.	11.	17.	13.	16.	11.	21.	9.	13.	26.
29	4.	26.	0.	4.	19.	6.	20.	22.	11.	18.
30	11.	18.	16.	18.	8.	19.	16.	17.	3.	12.
31	0.	25.	10.	16.	13.	11.	9.	11.	12.	20.
32	14.	0.	10.	4.	5.	10.	13.	13.	11.	25.
33	8.	21.	0.	3.	10.	6.	6.	9.	10.	19.
34	17.	22.	16.	0.	14.	15.	17.	17.	16.	22.
35	15.	12.	6.	10.	0.	18.	19.	17.	21.	11.
36	7.	21.	10.	18.	4.	0.	10.	9.	15.	19.
37	15.	23.	18.	19.	17.	12.	1.	17.	4.	12.
38	15.	30.	29.	24.	12.	18.	9.	2.	9.	15.
39	5.	34.	7.	15.	24.	24.	23.	27.	0.	24.
40	9.	30.	17.	22.	10.	8.	14.	17.	19.	0.
41	22.	17.	11.	18.	15.	20.	7.	10.	6.	14.
42	14.	16.	15.	7.	16.	7.	5.	9.	9.	12.
43	12.	41.	26.	36.	22.	14.	11.	13.	19.	29.
44	49.	50.	15.	28.	50.	47.	51.	52.	51.	61.
45	9.	35.	18.	28.	16.	7.	8.	10.	13.	23.
46	9.	20.	9.	11.	11.	8.	7.	9.	10.	18.
47	27.	22.	31.	31.	10.	14.	16.	8.	12.	17.
48	29.	31.	24.	22.	25.	31.	12.	19.	21.	30.
49	13.	37.	19.	29.	22.	16.	7.	10.	12.	16.
50	24.	22.	24.	27.	25.	22.	10.	12.	13.	24.
51	62.	76.	64.	63.	63.	64.	63.	67.	65.	75.
52	18.	46.	34.	38.	33.	30.	5.	32.	15.	8.

MATRIX : % DIFFERENCE IN MULTIPLIERS: RAS/MRIO

COLUMN / ROW	31	32	33	34	35	36	37	38	39	40
53	9.	43.	32.	33.	29.	22.	5.	10.	11.	13.
54	12.	23.	16.	17.	15.	15.	14.	17.	16.	21.
55	14.	33.	18.	22.	20.	7.	14.	13.	19.	28.
56	14.	26.	18.	17.	17.	17.	16.	17.	19.	23.
57	14.	32.	24.	24.	24.	24.	22.	25.	24.	30.
58	15.	30.	14.	20.	19.	15.	16.	19.	19.	27.
59	13.	20.	13.	17.	16.	14.	13.	16.	16.	23.
60	15.	29.	17.	21.	18.	16.	15.	18.	17.	27.
61	13.	28.	15.	20.	18.	13.	11.	14.	15.	24.
62	14.	20.	11.	10.	11.	14.	8.	14.	12.	14.
63	34.	40.	30.	25.	27.	30.	28.	32.	28.	29.
64	20.	16.	19.	5.	8.	9.	9.	12.	15.	22.
65	6.	19.	8.	11.	9.	8.	7.	9.	9.	17.
66	14.	21.	11.	11.	12.	11.	9.	11.	13.	17.
67	99.	111.	90.	96.	97.	96.	96.	99.	100.	108.
68	7.	21.	9.	14.	6.	7.	6.	8.	10.	18.
69	8.	16.	5.	8.	7.	9.	7.	8.	8.	16.
70	7.	19.	8.	10.	9.	10.	8.	10.	9.	17.
71	6.	22.	10.	13.	13.	14.	13.	14.	14.	19.
72	11.	16.	10.	11.	9.	11.	10.	12.	11.	14.
73	7.	17.	9.	9.	9.	10.	9.	11.	9.	18.
74	9.	21.	9.	12.	11.	8.	10.	12.	12.	18.
75	80.	87.	78.	77.	75.	76.	77.	79.	77.	86.
76	13.	21.	9.	12.	13.	12.	12.	14.	14.	19.
77	13.	22.	12.	6.	12.	14.	12.	14.	16.	20.
78	9.	20.	5.	12.	10.	10.	6.	9.	11.	18.

MATRIX -: % DIFFERENCE IN MULTIPLIERS: RAS/MRIO

COLUMN / ROW	41	42	43	44	45	46	47	48	49	50
1	32.	38.	39.	22.	32.	40.	34.	31.	36.	26.
2	34.	41.	41.	26.	34.	41.	36.	33.	39.	27.
3	21.	31.	36.	20.	30.	40.	32.	24.	32.	26.
4	42.	49.	47.	32.	40.	48.	43.	40.	45.	35.
5	20.	29.	28.	16.	21.	30.	27.	24.	27.	20.
6	23.	31.	31.	27.	31.	37.	31.	28.	31.	22.
7	18.	28.	25.	14.	19.	28.	26.	23.	25.	19.
8	31.	42.	37.	27.	33.	40.	35.	30.	35.	30.
9	23.	30.	29.	19.	24.	35.	27.	27.	28.	20.
10	37.	46.	46.	33.	39.	51.	44.	42.	44.	36.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	26.	35.	33.	22.	27.	35.	30.	28.	32.	22.
13	2.	8.	7.	-2.	2.	9.	4.	2.	6.	-2.
14	26.	33.	32.	18.	26.	34.	28.	25.	30.	20.
15	21.	27.	27.	16.	21.	28.	23.	21.	25.	16.
16	26.	31.	35.	22.	27.	29.	30.	23.	33.	18.
17	24.	19.	35.	18.	23.	30.	32.	22.	33.	24.
18	16.	24.	24.	13.	18.	26.	20.	18.	22.	13.
19	26.	29.	29.	15.	24.	35.	27.	26.	30.	20.
20	17.	26.	32.	16.	26.	37.	29.	20.	28.	23.
21	15.	23.	22.	11.	17.	37.	24.	19.	22.	13.
22	33.	38.	41.	25.	34.	43.	38.	35.	39.	30.
23	31.	41.	39.	6.	32.	41.	33.	34.	38.	28.
24	35.	46.	50.	38.	47.	56.	49.	48.	48.	38.
25	14.	22.	24.	14.	22.	31.	23.	24.	24.	14.
26	51.	61.	59.	45.	51.	59.	55.	51.	56.	47.
27	26.	32.	37.	24.	31.	40.	33.	31.	34.	27.
28	20.	33.	37.	21.	27.	34.	35.	26.	36.	26.
29	20.	29.	33.	20.	28.	37.	28.	21.	31.	19.
30	14.	21.	31.	8.	16.	23.	26.	25.	28.	27.
31	21.	30.	27.	18.	23.	30.	25.	20.	25.	20.
32	15.	23.	28.	9.	14.	21.	23.	17.	25.	17.
33	19.	26.	27.	6.	21.	31.	25.	15.	20.	16.
34	25.	21.	32.	20.	26.	33.	27.	26.	31.	21.
35	22.	24.	37.	20.	29.	38.	35.	30.	37.	27.
36	16.	22.	21.	15.	20.	32.	19.	21.	21.	13.
37	14.	22.	22.	10.	15.	23.	20.	17.	20.	13.
38	16.	24.	24.	20.	24.	29.	24.	21.	24.	15.
39	29.	36.	42.	22.	31.	39.	37.	34.	39.	31.
40	29.	38.	23.	24.	13.	21.	18.	13.	18.	26.
41	0.	23.	20.	9.	16.	23.	20.	18.	23.	14.
42	15.	1.	22.	11.	15.	24.	22.	16.	19.	12.
43	31.	42.	1.	4.	10.	18.	38.	13.	19.	33.
44	63.	72.	72.	0.	65.	74.	68.	64.	70.	58.
45	24.	34.	32.	21.	0.	36.	31.	29.	32.	24.
46	19.	28.	18.	17.	21.	1.	19.	22.	25.	16.
47	15.	23.	20.	11.	14.	23.	1.	16.	20.	12.
48	23.	43.	42.	29.	34.	45.	33.	1.	41.	32.
49	23.	30.	20.	8.	14.	21.	19.	15.	1.	21.
50	25.	34.	24.	12.	22.	26.	33.	23.	33.	1.
51	77.	89.	86.	68.	78.	56.	82.	78.	84.	72.
52	29.	43.	40.	25.	29.	42.	39.	31.	38.	33.

MATRIX : % DIFFERENCE IN MULTIPLIERS: RAS/MRIO

COLUMN	41	42	43	44	45	46	47	48	49	50
ROW										
53	21.	24.	20.	16.	15.	19.	17.	14.	18.	19.
54	25.	32.	31.	8.	25.	33.	27.	25.	29.	20.
55	22.	34.	35.	8.	30.	37.	33.	31.	27.	27.
56	25.	34.	32.	21.	26.	34.	29.	27.	31.	22.
57	34.	31.	40.	30.	34.	40.	36.	33.	28.	31.
58	29.	38.	17.	7.	19.	22.	34.	30.	29.	10.
59	26.	34.	22.	9.	17.	33.	30.	27.	31.	23.
60	29.	38.	37.	23.	30.	38.	25.	32.	36.	27.
61	26.	36.	34.	14.	27.	36.	33.	30.	33.	25.
62	21.	30.	22.	15.	27.	36.	30.	20.	21.	19.
63	38.	47.	46.	28.	39.	47.	41.	38.	43.	32.
64	24.	25.	32.	21.	25.	34.	28.	26.	30.	22.
65	19.	27.	26.	14.	20.	28.	25.	22.	25.	17.
66	18.	28.	26.	16.	20.	27.	23.	21.	24.	17.
67	111.	125.	122.	104.	112.	124.	117.	112.	119.	105.
68	19.	27.	27.	16.	20.	30.	24.	22.	25.	17.
69	17.	25.	23.	11.	17.	25.	21.	18.	22.	15.
70	18.	26.	27.	13.	17.	27.	23.	20.	25.	15.
71	20.	29.	34.	20.	24.	29.	26.	18.	28.	17.
72	18.	26.	24.	13.	19.	26.	21.	19.	23.	15.
73	19.	26.	25.	12.	20.	27.	23.	21.	24.	16.
74	21.	29.	26.	15.	20.	27.	25.	21.	25.	18.
75	90.	100.	99.	83.	90.	102.	93.	90.	96.	82.
76	21.	29.	27.	17.	21.	28.	24.	21.	25.	17.
77	21.	29.	27.	16.	20.	27.	24.	20.	25.	17.
78	19.	27.	24.	15.	19.	29.	26.	23.	25.	19.

MATRIX : % DIFFERENCE IN MULTIPLIERS: RAS/MRIO

COLUMN	51	52	53	54	55	56	57	58	59	60
ROW										
1	21.	49.	31.	37.	28.	27.	35.	35.	26.	23.
2	23.	51.	33.	38.	30.	28.	38.	37.	30.	25.
3	27.	43.	32.	31.	27.	24.	39.	36.	22.	27.
4	31.	57.	41.	45.	36.	36.	46.	43.	34.	33.
5	23.	39.	24.	26.	19.	30.	35.	30.	13.	21.
6	23.	41.	25.	28.	21.	26.	30.	26.	19.	18.
7	21.	38.	24.	25.	21.	28.	35.	29.	11.	21.
8	27.	50.	31.	39.	25.	31.	40.	39.	24.	25.
9	27.	39.	24.	26.	20.	31.	29.	27.	15.	22.
10	43.	60.	43.	47.	40.	49.	47.	44.	33.	42.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	19.	43.	28.	34.	26.	27.	33.	34.	17.	22.
13	-6.	15.	1.	7.	-1.	-11.	4.	3.	-4.	-4.
14	16.	42.	25.	31.	22.	21.	29.	29.	20.	18.
15	11.	36.	19.	26.	17.	16.	23.	22.	16.	13.
16	21.	43.	24.	25.	22.	19.	32.	26.	25.	18.
17	14.	31.	19.	23.	12.	18.	29.	24.	9.	17.
18	12.	33.	18.	21.	14.	14.	21.	20.	12.	12.
19	19.	40.	25.	29.	21.	23.	31.	29.	2.	17.
20	25.	38.	28.	26.	23.	20.	36.	33.	17.	24.
21	10.	26.	17.	16.	14.	12.	22.	19.	11.	12.
22	23.	46.	26.	27.	32.	7.	32.	36.	14.	15.
23	25.	50.	34.	40.	31.	24.	39.	38.	5.	7.
24	35.	57.	38.	42.	33.	40.	41.	44.	39.	41.
25	18.	31.	20.	17.	11.	17.	22.	19.	17.	19.
26	40.	70.	44.	56.	51.	36.	57.	58.	45.	43.
27	28.	44.	29.	32.	26.	33.	30.	27.	23.	28.
28	21.	41.	23.	24.	17.	19.	26.	25.	18.	19.
29	22.	45.	28.	37.	26.	26.	33.	33.	23.	20.
30	16.	28.	16.	16.	12.	21.	26.	32.	6.	14.
31	17.	38.	21.	28.	16.	21.	29.	28.	14.	16.
32	10.	29.	16.	15.	12.	14.	20.	16.	6.	13.
33	18.	39.	23.	23.	21.	19.	30.	27.	14.	16.
34	15.	43.	25.	17.	22.	20.	27.	27.	20.	16.
35	24.	33.	24.	19.	10.	19.	18.	24.	4.	25.
36	25.	30.	16.	17.	13.	27.	21.	18.	10.	15.
37	16.	31.	17.	19.	14.	22.	27.	22.	7.	15.
38	16.	33.	18.	21.	14.	18.	23.	19.	13.	12.
39	27.	44.	31.	32.	27.	34.	41.	42.	20.	26.
40	17.	29.	15.	26.	27.	28.	35.	35.	16.	25.
41	10.	28.	17.	16.	12.	12.	19.	19.	5.	10.
42	9.	27.	15.	15.	12.	11.	20.	18.	5.	10.
43	33.	33.	14.	40.	32.	38.	47.	37.	4.	22.
44	52.	85.	64.	64.	59.	56.	69.	67.	52.	54.
45	28.	44.	28.	31.	25.	33.	36.	31.	18.	24.
46	17.	38.	22.	26.	20.	20.	28.	26.	13.	16.
47	10.	32.	16.	18.	14.	12.	21.	18.	6.	9.
48	38.	54.	40.	41.	27.	41.	47.	43.	28.	35.
49	10.	29.	17.	20.	25.	20.	36.	18.	8.	12.
50	26.	44.	26.	27.	25.	15.	36.	31.	10.	12.
51	2.	100.	76.	81.	75.	16.	82.	85.	60.	42.
52	37.	1.	38.	10.	39.	32.	52.	46.	1.	25.

MATRIX : % DIFFERENCE IN MULTIPLIERS: RAS/MRIO

COLUMN / ROW	51	52	53	54	55	56	57	58	59	60
53	6.	24.	1.	14.	10.	7.	26.	16.	14.	15.
54	15.	41.	24.	0.	21.	20.	27.	27.	18.	16.
55	7.	29.	15.	15.	0.	9.	19.	16.	5.	14.
56	14.	42.	17.	32.	23.	0.	22.	29.	6.	8.
57	9.	46.	17.	35.	25.	10.	1.	21.	14.	14.
58	19.	25.	16.	32.	9.	10.	33.	1.	4.	9.
59	20.	42.	27.	33.	24.	22.	32.	21.	1.	19.
60	25.	47.	31.	34.	27.	15.	37.	34.	20.	1.
61	24.	45.	29.	33.	25.	28.	36.	32.	17.	24.
62	16.	28.	18.	16.	21.	15.	27.	24.	6.	9.
63	29.	56.	38.	49.	38.	29.	42.	43.	24.	11.
64	16.	32.	24.	16.	23.	23.	28.	25.	19.	20.
65	15.	36.	21.	24.	17.	19.	27.	24.	10.	15.
66	11.	35.	20.	27.	19.	15.	24.	24.	14.	12.
67	98.	138.	111.	125.	109.	101.	118.	119.	104.	97.
68	18.	37.	21.	25.	19.	21.	26.	25.	13.	16.
69	12.	31.	18.	20.	14.	14.	22.	20.	9.	13.
70	12.	36.	20.	26.	20.	18.	26.	25.	10.	16.
71	13.	39.	23.	30.	20.	18.	27.	27.	18.	19.
72	11.	36.	18.	24.	16.	15.	22.	21.	13.	9.
73	12.	35.	21.	18.	16.	13.	24.	24.	11.	12.
74	14.	36.	21.	28.	19.	16.	25.	24.	3.	13.
75	75.	114.	88.	98.	84.	82.	94.	93.	81.	78.
76	13.	36.	21.	28.	19.	15.	24.	25.	16.	13.
77	12.	36.	22.	26.	21.	15.	26.	26.	12.	15.
78	14.	36.	21.	24.	18.	18.	26.	22.	11.	14.

MATRIX : % DIFFERENCE IN MULTIPLIERS: RAS/MRIO

COLUMN / ROW	61	62	63	64	65	66	67	68	69	70
1	23.	32.	26.	22.	16.	15.	17.	44.	28.	18.
2	26.	31.	28.	19.	18.	17.	17.	46.	27.	20.
3	10.	35.	28.	12.	16.	13.	24.	37.	26.	25.
4	33.	41.	35.	31.	25.	25.	26.	55.	14.	28.
5	15.	32.	24.	19.	18.	25.	48.	49.	39.	40.
6	19.	30.	19.	18.	27.	23.	49.	51.	43.	42.
7	13.	33.	18.	20.	16.	19.	27.	23.	26.	19.
8	25.	41.	31.	26.	11.	13.	26.	28.	17.	22.
9	17.	33.	22.	18.	13.	9.	32.	33.	22.	22.
10	34.	53.	30.	39.	31.	38.	56.	58.	44.	44.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	20.	34.	23.	21.	7.	4.	25.	27.	17.	13.
13	-5.	5.	-4.	-3.	-5.	-9.	-13.	12.	-6.	-9.
14	18.	26.	21.	18.	11.	10.	8.	37.	17.	12.
15	13.	24.	14.	14.	12.	6.	4.	32.	12.	8.
16	19.	20.	17.	10.	19.	15.	31.	42.	27.	26.
17	6.	23.	18.	6.	9.	15.	29.	41.	21.	21.
18	10.	21.	11.	9.	8.	5.	15.	29.	14.	19.
19	4.	29.	22.	14.	10.	8.	15.	36.	10.	10.
20	7.	33.	26.	10.	13.	10.	34.	32.	24.	24.
21	17.	21.	20.	11.	19.	17.	21.	46.	8.	24.
22	6.	34.	28.	7.	13.	10.	4.	43.	23.	16.
23	5.	36.	29.	27.	12.	7.	28.	31.	21.	18.
24	34.	46.	27.	26.	35.	28.	45.	60.	26.	26.
25	19.	22.	11.	8.	16.	19.	26.	46.	8.	24.
26	44.	57.	46.	43.	31.	26.	44.	64.	36.	23.
27	25.	37.	14.	24.	21.	24.	39.	40.	31.	32.
28	15.	28.	15.	11.	19.	18.	33.	45.	21.	27.
29	20.	35.	26.	20.	16.	19.	19.	50.	17.	22.
30	8.	25.	26.	8.	9.	5.	28.	29.	18.	17.
31	16.	30.	21.	17.	6.	5.	18.	28.	9.	12.
32	9.	20.	9.	8.	7.	7.	19.	33.	11.	17.
33	14.	22.	13.	7.	18.	14.	25.	43.	18.	18.
34	19.	20.	8.	7.	15.	8.	20.	36.	11.	10.
35	7.	22.	7.	8.	11.	12.	21.	34.	12.	17.
36	11.	25.	12.	11.	11.	8.	29.	31.	16.	20.
37	9.	24.	14.	11.	11.	17.	35.	39.	30.	30.
38	13.	23.	11.	11.	19.	15.	37.	41.	33.	32.
39	22.	22.	30.	24.	14.	13.	20.	40.	21.	21.
40	4.	37.	26.	22.	8.	5.	27.	28.	18.	15.
41	12.	20.	11.	9.	15.	15.	25.	44.	16.	26.
42	8.	20.	11.	9.	8.	12.	29.	35.	22.	23.
43	3.	48.	35.	35.	6.	27.	39.	32.	38.	39.
44	53.	61.	54.	45.	46.	44.	43.	77.	50.	45.
45	9.	38.	25.	25.	15.	11.	34.	27.	28.	27.
46	12.	28.	18.	16.	10.	7.	30.	30.	21.	19.
47	13.	20.	25.	25.	14.	20.	34.	46.	31.	42.
48	24.	41.	33.	29.	33.	33.	54.	60.	36.	34.
49	7.	24.	26.	24.	14.	19.	41.	39.	34.	36.
50	14.	35.	18.	22.	16.	15.	35.	41.	23.	31.
51	68.	83.	68.	67.	58.	35.	53.	91.	61.	44.
52	5.	54.	42.	22.	14.	12.	36.	36.	36.	34.

ATRIX : % DIFFERENCE IN MULTIPLIERS: RAS/MRIO

ROW \ COLUMN	61	62	63	64	65	66	67	68	69	70
53	6.	18.	9.	10.	12.	17.	35.	36.	37.	38.
54	6.	28.	18.	16.	10.	6.	11.	31.	15.	12.
55	9.	19.	9.	10.	9.	9.	25.	27.	12.	19.
56	12.	30.	19.	16.	14.	4.	-6.	35.	15.	10.
57	23.	22.	13.	11.	11.	13.	7.	42.	22.	23.
58	12.	26.	24.	23.	5.	6.	25.	35.	10.	20.
59	8.	33.	21.	20.	7.	6.	22.	33.	10.	13.
60	22.	26.	25.	24.	8.	17.	18.	38.	22.	20.
61	0.	37.	25.	23.	5.	19.	20.	33.	23.	24.
62	16.	1.	18.	15.	14.	11.	24.	36.	25.	18.
63	30.	24.	0.	20.	26.	15.	28.	57.	33.	15.
64	14.	22.	21.	0.	15.	8.	26.	38.	15.	7.
65	12.	27.	16.	14.	1.	9.	9.	28.	12.	11.
66	15.	24.	13.	14.	7.	0.	-6.	31.	9.	4.
67	103.	120.	101.	102.	90.	85.	0.	132.	94.	81.
68	14.	29.	19.	17.	10.	4.	6.	4.	8.	6.
69	11.	22.	12.	10.	7.	6.	9.	30.	0.	10.
70	13.	25.	15.	14.	6.	4.	7.	28.	8.	0.
71	16.	28.	16.	15.	8.	4.	15.	30.	7.	5.
72	12.	22.	12.	12.	10.	5.	5.	32.	8.	8.
73	13.	21.	11.	11.	8.	5.	4.	28.	7.	3.
74	14.	27.	16.	15.	3.	1.	17.	27.	5.	7.
75	78.	95.	79.	80.	75.	63.	42.	108.	68.	70.
76	16.	26.	15.	15.	8.	5.	13.	32.	11.	3.
77	14.	27.	15.	12.	7.	-1.	11.	24.	7.	-1.
78	13.	26.	16.	16.	4.	2.	8.	26.	6.	5.

ATRIX : % DIFFERENCE IN MULTIPLIERS: RAS/MRIO

ROW \ COLUMN	71	72	73	74	75	76	77	78
1	36.	16.	58.	23.	9.	11.	14.	26.
2	28.	18.	61.	25.	13.	12.	17.	23.
3	21.	17.	69.	24.	17.	16.	17.	10.
4	29.	25.	72.	22.	20.	20.	24.	23.
5	34.	29.	81.	21.	30.	29.	23.	20.
6	35.	28.	84.	27.	29.	31.	30.	23.
7	31.	21.	64.	20.	24.	16.	1.	4.
8	28.	14.	66.	14.	20.	18.	15.	14.
9	18.	12.	70.	12.	16.	13.	14.	7.
10	43.	32.	85.	36.	27.	32.	35.	16.
11	0.	0.	0.	0.	0.	0.	0.	0.
12	14.	9.	62.	15.	9.	7.	8.	3.
13	5.	-13.	24.	-6.	-12.	-11.	-12.	-4.
14	29.	10.	51.	16.	8.	6.	9.	19.
15	24.	6.	46.	11.	4.	5.	5.	16.
16	35.	11.	65.	22.	21.	23.	15.	23.
17	29.	12.	65.	13.	18.	19.	6.	18.
18	22.	3.	61.	8.	13.	10.	13.	10.
19	25.	1.	51.	5.	11.	2.	1.	4.
20	17.	17.	75.	21.	18.	17.	16.	7.
21	33.	17.	65.	14.	18.	15.	19.	20.
22	30.	10.	58.	20.	13.	15.	16.	15.
23	16.	13.	59.	12.	14.	10.	8.	5.
24	46.	27.	82.	34.	36.	31.	26.	27.
25	33.	10.	60.	15.	19.	14.	16.	20.
26	47.	32.	74.	39.	25.	22.	26.	34.
27	26.	18.	63.	23.	12.	18.	21.	11.
28	28.	17.	72.	16.	22.	21.	15.	17.
29	38.	1.	44.	20.	17.	0.	5.	13.
30	15.	9.	56.	4.	12.	9.	10.	4.
31	19.	6.	53.	7.	10.	8.	7.	7.
32	19.	8.	58.	5.	14.	9.	7.	9.
33	32.	4.	57.	18.	8.	12.	10.	20.
34	28.	2.	49.	15.	3.	6.	4.	18.
35	18.	16.	58.	4.	12.	8.	10.	8.
36	17.	5.	57.	4.	14.	11.	10.	4.
37	26.	21.	69.	14.	22.	20.	15.	12.
38	27.	20.	72.	20.	21.	23.	21.	15.
39	25.	14.	61.	14.	16.	10.	15.	14.
40	14.	11.	63.	17.	11.	8.	9.	3.
41	29.	19.	65.	6.	19.	16.	10.	17.
42	20.	8.	62.	6.	18.	16.	12.	9.
43	42.	29.	44.	3.	36.	30.	10.	18.
44	57.	43.	45.	50.	41.	36.	43.	45.
45	18.	19.	50.	20.	21.	16.	5.	7.
46	16.	15.	68.	17.	14.	11.	11.	5.
47	40.	25.	56.	13.	36.	27.	18.	20.
48	43.	29.	85.	34.	31.	31.	31.	28.
49	26.	25.	66.	16.	30.	24.	18.	15.
50	37.	19.	66.	9.	24.	20.	16.	17.
51	73.	57.	58.	62.	57.	51.	53.	56.
52	16.	19.	41.	9.	26.	18.	15.	5.

MATRIX : % DIFFERENCE IN MULTIPLIERS: RAS/MRIO

COLUMN / ROW	71	72	73	74	75	76	77	78
53	28.	8.	48.	10.	28.	24.	20.	13.
54	17.	2.	52.	14.	8.	7.	6.	5.
55	17.	9.	63.	7.	14.	12.	8.	4.
56	22.	12.	51.	11.	10.	9.	12.	11.
57	37.	5.	65.	20.	16.	14.	14.	23.
58	26.	8.	48.	2.	16.	10.	8.	9.
59	23.	7.	52.	5.	12.	8.	5.	7.
60	31.	18.	61.	20.	17.	15.	11.	18.
61	33.	6.	49.	19.	18.	17.	7.	6.
62	20.	13.	57.	12.	16.	3.	13.	9.
63	42.	4.	48.	31.	4.	7.	22.	26.
64	22.	2.	47.	18.	4.	5.	12.	10.
65	21.	9.	50.	11.	8.	8.	3.	9.
66	20.	6.	47.	7.	7.	4.	9.	8.
67	108.	83.	161.	92.	84.	75.	94.	88.
68	22.	6.	48.	10.	7.	3.	5.	2.
69	18.	6.	49.	4.	6.	6.	7.	8.
70	14.	5.	51.	6.	5.	7.	8.	5.
71	1.	3.	46.	6.	2.	2.	4.	12.
72	24.	0.	46.	8.	4.	2.	4.	13.
73	16.	6.	2.	9.	4.	6.	5.	5.
74	18.	2.	44.	0.	6.	3.	3.	6.
75	95.	65.	130.	73.	9.	68.	65.	78.
76	19.	5.	49.	10.	5.	0.	11.	7.
77	10.	5.	37.	10.	10.	-1.	0.	13.
78	18.	3.	45.	5.	5.	2.	3.	0.

MATRIX : % DIFFERENCE IN MULTIPLIERS: BEA/UN

ROW \ COLUMN	1	2	3	4	5	6	7	8	9	10
1	-2.	-6.	80.	-19.	74.	39.	38.	120.	36.	-302.
2	-8.	-1.	198.	-13.	82.	38.	40.	138.	43.	-243.
3	130.	-259.	-0.	-1.	4.	-7.	-4.	3.	35.	-134.
4	-10.	-8.	-2.	1.	110.	38.	39.	194.	49.	-401.
5	-2.	-7.	-5.	1.	-0.	26.	-6.	-2.	-1.	-497.
6	-4.	-9.	3.	-11.	88.	-1.	8.	0.	54.	-121.
7	-3.	-5.	10.	-1.	-1.	-2.	-0.	107.	28.	120.
8	-9.	-5.	1.	62.	4.	15.	-0.	2.	52.	6.
9	-5.	-5.	84.	96.	-1.	24.	7.	10.	1.	9.
10	-18.	-17.	104.	100.	3.	5.	-12.	-12.	13.	-1.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	25.	20.	61.	59.	5.	6.	7.	-1.	9.	13.
13	112.	67.	-412.	27.	424.	103.	709.	95.	199.	-209.
14	-4.	1.	17.	-25.	14.	7.	8.	24.	13.	-193.
15	-0.	1.	-9.	-21.	2.	-1.	-0.	4.	10.	127.
16	2.	3.	-9.	-20.	26.	11.	14.	46.	21.	76.
17	-1.	12.	-14.	-29.	9.	3.	-1.	10.	-1.	121.
18	18.	25.	-9.	-22.	12.	3.	5.	28.	45.	-548.
19	-8.	-9.	-2.	17.	38.	36.	43.	43.	188.	-127.
20	58.	211.	10.	-19.	8.	-3.	-0.	5.	48.	-857.
21	-12.	-7.	27.	-21.	28.	10.	11.	55.	26.	-194.
22	155.	231.	-2.	1683.	148.	94.	89.	123.	-1333.	221.
23	37.	18.	26.	-417.	93.	345.	207.	25.	-2527.	64.
24	14.	38.	-2.	-28.	50.	26.	25.	51.	40.	-3883.
25	2.	20.	-18.	-30.	16.	9.	5.	45.	28.	-160.
26	18.	34.	10.	25.	36.	18.	22.	32.	26.	73.
27	-10.	-8.	50.	73.	3.	-2.	-1.	7.	-0.	-162.
28	4.	7.	-14.	-23.	2.	2.	-5.	7.	-6.	878.
29	-5.	12.	42.	-13.	15.	44.	19.	109.	133.	-21.
30	21.	19.	-9.	-3.	8.	7.	7.	-1.	10.	488.
31	-9.	-7.	4.	64.	-0.	4.	0.	48.	1.	6.
32	-2.	-2.	8.	11.	2.	2.	0.	6.	-8.	-16.
33	-2.	3.	17.	-25.	59.	36.	71.	80.	258.	-154.
34	-8.	15.	-10.	-31.	23.	8.	12.	22.	19.	98.
35	17.	46.	-3.	-2.	32.	44.	19.	11.	27.	240.
36	4.	2.	11.	12.	1.	1.	0.	-2.	-25589.	-175.
37	3.	2.	-11.	-22.	-1.	-3.	-3.	1.	-6.	-15.
38	2.	3.	-11.	-26.	5.	8.	3.	3.	1.	141.
39	15.	7.	-10.	4.	5.	4.	4.	109.	21.	-115.
40	30.	22.	1.	88.	4.	0.	1.	-2.	2.	-16.
41	1.	5.	0.	-14.	8.	8.	4.	11.	-1.	-10.
42	-7.	15.	-17.	-30.	5.	-1.	0.	2.	15.	393.
43	-16.	-18.	1.	67.	-4.	-4.	-4.	-4.	-13.	-32.
44	-14.	-10.	537.	287.	27.	66.	104.	72.	75.	877.
45	2.	-2.	26.	46.	-1.	-2.	-2.	-3.	-9.	-31.
46	12.	5.	34.	49.	26.	-2.	22.	4.	-10.	-30.
47	5.	4.	1.	-11.	-4.	-8.	-6.	3.	-11.	-25.
48	-7.	-14.	15.	1.	7.	-2.	13.	6.	17.	-110.
49	-5.	-11.	2.	102.	-6.	-3.	-7.	-3.	-12.	-26.
50	-7.	-9.	14.	38.	40.	-5.	-2.	13.	-10.	-23.
51	40.	32.	176.	147.	56.	96.	111.	121.	116.	214.
52	4.	-3.	41.	94.	-2.	15.	20.	5.	31.	62.

MATRIX : % DIFFERENCE IN MULTIPLIERS: BEA/UN

COLUMN	1	2	3	4	5	6	7	8	9	10
ROW										
53	2.	-2.	-8.	21.	1.	4.	-1.	-4.	-9.	-27.
54	21.	19.	-5.	15.	13.	11.	14.	6.	28.	72.
55	101.	61.	-14.	71.	12.	7.	0.	5.	20.	-23.
56	23.	32.	117.	35.	50.	46.	158.	11.	176.	80.
57	50.	73.	340.	70.	70.	123.	165.	4.	145.	38.
58	-9.	-8.	-12.	74.	-4.	-4.	-7.	5.	-11.	-21.
59	3.	7.	31.	82.	21.	42.	26.	29.	2.	9.
60	18.	77.	67.	2.	23.	359.	740.	55.	25086.	13.
61	25.	30.	-14.	8.	2.	-1.	-0.	13.	36.	-14.
62	21.	27.	2.	69.	9.	15.	43.	4.	29.	67.
63	2.	2.	17.	15.	6.	6.	7.	20.	14.	83.
64	7.	8.	-8.	-14.	10.	0.	9.	11.	42.	84.
65	-4.	-2.	-3.	-15.	-2.	3.	-1.	6.	15.	-7.
66	-3.	-2.	25.	13.	3.	2.	2.	11.	17.	10.
67	207.	1422.	1508.	699.	1813.	901.	944.	1257.	1688.	270.
68	-6.	-8.	25.	13.	2.	-3.	-2.	34.	-1.	-5.
69	-5.	-4.	1.	-8.	1.	-0.	-0.	5.	0.	42.
70	1.	2.	24.	14.	4.	-2.	0.	4.	-2.	2.
71	-6.	-5.	61.	22.	-1.	3.	1.	-2.	2.	-4.
72	5.	4.	-6.	-19.	4.	1.	2.	6.	7.	292.
73	-2.	-4.	35.	37.	0.	3.	2.	10.	7.	79.
74	-7.	-6.	5.	27.	-1.	2.	1.	1.	-5.	3.
75	249.	458.	76.	99.	413.	181.	200.	207.	193.	424.
76	-8.	-5.	92.	-11.	3.	-0.	0.	7.	7.	-22.
77	2.	-2.	11.	5.	-4.	-3.	-3.	4.	1.	-9.
78	1.	-1.	-4.	-6.	-0.	-1.	-1.	2.	-6.	-16.

MATRIX 4: % DIFFERENCE IN MULTIPLIERS: BEA/UN

ROW \ COLUMN	11	12	13	14	15	16	17	18	19	20
1	21.	20.	16.	-4.	-5.	1.	-10.	5.	5.	104.
2	8.	22.	17.	-5.	-1.	-7.	1.	-6.	24.	172.
3	-5.	-6.	-8.	2.	96.	56.	26.	-1.	51.	-7.
4	7.	11.	23.	-8.	-8.	-13.	-8.	-9.	14.	7.
5	-4.	-3.	22.	-6.	4.	-3.	13.	3.	26.	17.
6	-6.	-5.	-2.	7.	1.	-4.	10.	-2.	18.	11.
7	-3.	-0.	11.	-3.	-2.	-8.	-2.	-5.	12.	8.
8	-0.	-2.	13.	-4.	1.	28.	42.	26.	42.	7.
9	-4.	-0.	40.	-1.	-2.	1.	34.	8.	47.	21.
10	2.	2.	7.	-8.	-13.	-14.	-1.	-10.	9.	8.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	6.	0.	15.	15.	16.	11.	11.	11.	13.	14.
13	58.	600.	-1.	105.	27.	46.	45.	36.	28.	152.
14	5.	1.	7.	-1.	1.	4.	-7.	6.	10.	13.
15	-1.	-1.	2.	-0.	-0.	2.	2.	0.	-6.	-2.
16	9.	14.	24.	7.	19.	-0.	3.	-2.	-7.	22.
17	2.	2.	7.	-1.	19.	21.	-0.	13.	-21.	-13.
18	2.	2.	7.	2.	12.	-420.	-5.	-0.	35.	-3.
19	13.	31.	367.	-5.	-4.	-136.	-2.	16.	-3.	19.
20	-1.	-1.	-9.	9.	18.	26.	27.	12.	23.	-2.
21	5.	4.	-19.	-6.	-4.	-10.	-1.	-6.	18.	292.
22	1.	120.	45.	154.	169.	137.	71.	2.	-662.	-449.
23	1.	6.	189.	74.	93.	75.	-128.	215.	-189.	-163.
24	21.	11.	33.	-2.	-0.	1.	-2.	2.	18.	33.
25	4.	1.	17.	-2.	0.	7.	1.	1.	-8.	7.
26	39.	21.	18.	-1.	1.	27.	31.	23.	21.	24.
27	3.	-2.	5.	-4.	-9.	-13.	-10.	-12.	5.	8.
28	3.	-4.	-2.	1.	2.	-2.	-5.	-1.	6.	5.
29	-1.	7.	10.	0.	-0.	-1.	-1.	0.	20.	42.
30	-1.	-0.	117.	5.	11.	3.	20.	3.	33.	-4.
31	-0.	-1.	10.	-5.	-5.	-3.	2.	0.	13.	4.
32	4.	1.	-16.	-1.	3.	119.	8.	31.	-21.	31.
33	21.	30.	43.	10.	9.	10.	30.	13.	1411.	24.
34	7.	2.	25.	-0.	6.	13.	3.	48.	75.	12.
35	-0.	1.	52.	-2.	29.	-3.	35.	-1.	37.	5.
36	-1.	-0.	87.	5.	4.	10.	44.	13.	53.	-3.
37	-3.	-2.	20.	-4.	3.	8.	24.	10.	39.	12.
38	-4.	-3.	2.	6.	4.	10.	20.	3.	26.	9.
39	1.	-6.	27.	-2.	2.	3.	9.	5.	24.	-9.
40	-0.	-0.	405.	19.	21.	2.	9.	8.	22.	18.
41	3.	2.	96.	-1.	10.	20.	28.	11.	77.	12.
42	-1.	-1.	28.	-1.	2.	8.	18.	4.	23.	-4.
43	0.	-2.	-1007.	-10.	-15.	-13.	-6.	-9.	3.	3.
44	-3.	9.	-1.	-11.	-10.	-15.	-9.	-13.	9.	257.
45	-1.	-1.	26.	1.	0.	0.	13.	4.	22.	15.
46	-1.	-2.	27.	2.	5.	-2.	5.	-1.	8.	-1.
47	12.	9.	71.	13.	7.	4.	30.	16.	76.	22.
48	19.	12.	123.	-3.	-6.	-8.	-2.	-7.	19.	-6.
49	5.	2.	45.	2.	-0.	-9.	4.	1.	42.	22.
50	7.	6.	95.	-1.	-0.	6.	28.	14.	35.	21.
51	99.	117.	93.	48.	37.	47.	46.	44.	69.	67.
52	-1.	-1.	235.	0.	-9.	-4.	-3.	-4.	0.	22.

MATRIX : % DIFFERENCE IN MULTIPLIERS: BEA/UN

COLUMN	11	12	13	14	15	16	17	18	19	20
ROW										
53	-1.	-3.	16.	4.	-2.	-5.	8.	-0.	31.	11.
54	2.	0.	48.	10.	9.	12.	11.	10.	5.	10.
55	-0.	-0.	108.	23.	37.	22.	27.	3.	40.	-16.
56	19.	13.	-14.	28.	32.	30.	31.	23.	27.	42.
57	88.	57.	-3.	41.	50.	63.	64.	41.	117.	96.
58	-3.	-3.	-4.	-5.	-7.	-5.	1.	-1.	7.	-2.
59	67.	38.	-239.	10.	15.	15.	20.	20.	51.	36.
60	172.	136.	-4.	20.	47.	34.	33.	48.	75.	27.
61	9.	5.	143.	1.	7.	2.	1.	-2.	9.	-16.
62	-0.	-1.	25.	15.	14.	8.	44.	6.	22.	9.
63	3.	4.	-5.	-1.	-2.	7.	12.	4.	2.	4.
64	2.	-0.	9.	7.	5.	62.	-10.	-2.	12.	21.
65	-1.	-1.	9.	-3.	-1.	-1.	-2.	-1.	3.	-3.
66	1.	0.	-6.	0.	2.	3.	0.	1.	-6.	3.
67	2076.	944.	918.	891.	4683.	1672.	1249.	1476.	1319.	1562.
68	-2.	-1.	6.	-2.	-3.	-5.	0.	-3.	5.	2.
69	-0.	-0.	8.	-3.	-2.	3.	-4.	0.	-9.	-0.
70	0.	-0.	1.	1.	2.	3.	2.	2.	-3.	2.
71	1.	0.	6.	-2.	-3.	-0.	2.	1.	1.	16.
72	-1.	-1.	3.	-1.	0.	7.	2.	3.	-8.	4.
73	0.	0.	2.	-1.	-1.	-0.	1.	1.	1.	6.
74	-1.	-0.	-0.	-3.	-5.	-3.	-2.	-0.	0.	-0.
75	302.	149.	180.	361.	475.	241.	228.	205.	177.	217.
76	0.	0.	-6.	-4.	-3.	1.	-5.	1.	-5.	9.
77	-8.	-5.	-7.	-2.	-4.	1.	-2.	-1.	-9.	-1.
78	-1.	-1.	9.	-2.	-2.	-2.	-1.	-0.	-1.	-2.

MATRIX : % DIFFERENCE IN MULTIPLIERS: BEA/UN

COLUMN / ROW	21	22	23	24	25	26	27	28	29	30
1	95.	10.	17.	11.	18.	18.	73.	74.	39.	-4.
2	119.	-1.	32.	15.	20.	20.	41.	70.	31.	-3.
3	19.	-5.	-8.	-9.	-7.	-46.	-15.	2.	41.	4.
4	35.	3.	12.	7.	14.	6.	28.	45.	36.	-1.
5	-20.	9.	-8.	20.	55.	-12.	-14.	11.	19.	-6.
6	33.	3.	19.	36.	24.	-17.	-16.	9.	50.	-5.
7	-13.	3.	-5.	-4.	-2.	-29.	-11.	-9.	12.	-2.
8	2.	16.	10.	10.	6.	19.	238.	185.	86.	37.
9	13.	26.	-1.	2.	4.	-35.	1.	27.	18.	6.
10	24.	-4.	2.	-6.	-9.	-48.	-22.	2.	34.	-8.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	11.	9.	8.	9.	8.	-20.	23.	20.	22.	14.
13	94.	92.	-176.	58.	79.	991.	-3.	11.	25.	14.
14	16.	2.	5.	-2.	1.	4.	9.	13.	-1.	-7.
15	-6.	-1.	2.	2.	2.	101.	-3.	-1.	-8.	-5.
16	46.	-5.	39.	23.	28.	-24.	13.	-328.	27.	67.
17	27.	-3.	-6.	35.	57.	-38.	29.	-177.	4.	203.
18	-8.	3.	-1.	5.	1.	-19.	-0.	9.	8.	1.
19	42.	138.	29.	-919.	637.	71.	-18.	63.	52.	3.
20	-7.	-5.	-7.	-6.	-5.	-45.	0.	0.	29.	15.
21	-1.	26.	10.	28.	45.	38.	-1.	-2.	6.	-4.
22	-738.	-0.	15.	877.	564.	-259.	555.	265.	800.	151.
23	-157.	-165.	-0.	519.	-176.	26654.	-359.	166.	941.	224.
24	138.	8.	45.	-1.	-5.	-48.	23.	-10.	8.	10.
25	8.	-1.	-5.	-4.	-0.	-42.	11.	4.	-9.	-0.
26	17.	22.	312.	75.	111.	-9.	49.	40.	14.	7.
27	27.	-5.	0.	-1.	-1.	-43.	-2.	-15.	1.	-7.
28	63.	-5.	-5.	6.	7.	-39.	54.	1.	2.	-7.
29	13.	5.	7.	5.	6.	-137.	-1243.	18.	-1.	13.
30	27.	-4.	-7.	9.	37.	-32.	-4.	20.	5.	-0.
31	4.	2.	2.	-1.	-2.	-8.	28.	24.	10.	-4.
32	64.	-3.	-6.	2.	8.	-35.	124.	590.	-10.	56.
33	48.	3.	-2.	8.	18.	28.	-9.	-5.	62.	4.
34	30.	6.	26.	18.	16.	58.	10.	13.	15.	0.
35	47.	5.	-9.	33.	71.	54.	132.	212.	-11.	40.
36	20.	18.	-7.	18.	22.	36.	10.	36.	11.	12.
37	-15.	6.	-5.	23.	109.	62.	-1.	22.	5.	-4.
38	21.	3.	16.	44.	24.	34.	-7.	20.	49.	-3.
39	17.	-6.	-6.	5.	6.	-24.	-6.	13.	-8.	-9.
40	19.	50.	208.	9.	8.	-18.	10.	21.	33.	20.
41	0.	19.	0.	45.	76.	-615.	50.	76.	0.	17.
42	6.	-4.	-3.	-3.	-1.	-32.	-9.	17.	1.	7.
43	-1.	17.	19.	-10.	-13.	-112.	-7.	-4.	-22.	-5.
44	111.	17.	36.	-6.	-18.	-106.	8.	-9.	-26.	-11.
45	-1.	15.	0.	0.	3.	-456.	-3.	8.	15.	6.
46	-7.	6.	50.	-3.	-1.	-40.	-9.	1.	17.	1.
47	35.	37.	100.	28.	33.	-173.	15.	34.	48.	26.
48	-8.	-3.	12.	-5.	-5.	-49.	-23.	3.	38.	-8.
49	9.	77.	67.	-3.	-0.	17.	-1.	9.	36.	11.
50	-9.	27.	-2.	24.	33.	1579.	18.	38.	12.	5.
51	74.	45.	-123.	392.	62.	-108.	67.	36.	8.	42.
52	51.	76.	107.	-5.	-12.	-108.	14.	-6.	-22.	-1.

MATRIX : % DIFFERENCE IN MULTIPLIERS: BEA/UN

COLUMN	21	22	23	24	25	26	27	28	29	30
ROW										
53	7.	50.	80.	7.	5.	-123.	-1.	16.	15.	7.
54	6.	28.	18.	9.	7.	22.	16.	13.	13.	2.
55	10.	10.	14.	4.	9.	44.	17.	20.	20.	23.
56	22.	58.	193.	33.	24.	292.	95.	39.	31.	23.
57	68.	210.	-519.	163.	65.	-471.	114.	108.	112.	36.
58	21.	16.	58.	2.	-1.	-152.	9.	3.	-6.	3.
59	32.	82.	109.	29.	21.	72.	40.	24.	45.	29.
60	6.	103.	951.	23.	16.	68.	-5126.	58.	76.	60.
61	-3.	-0.	-4.	-7.	-6.	-824.	-3.	-1.	-5.	-3.
62	-0.	70.	152.	43.	16.	28.	45.	18.	148.	18.
63	-1.	4.	35.	50.	44.	-22.	16.	28.	-6.	2.
64	33.	19.	13.	31.	23.	-1129.	30.	35.	22.	10.
65	-8.	-1.	-2.	-2.	-2.	-23.	-1.	1.	1.	-2.
66	-1.	1.	0.	4.	2.	3.	-1.	-1.	0.	-2.
67	1265.	1576.	1308.	1730.	1631.	1024.	1898.	2172.	5439.	1672.
68	-4.	0.	-2.	-4.	-2.	42.	-13.	-1.	8.	-1.
69	-2.	-1.	-1.	-0.	-0.	-15.	-2.	-1.	-2.	-4.
70	2.	0.	-3.	2.	3.	-15.	6.	3.	4.	1.
71	4.	1.	4.	8.	6.	-13.	37.	19.	4.	7.
72	-5.	1.	6.	1.	-0.	-7.	5.	4.	-8.	-5.
73	5.	1.	2.	3.	2.	36.	16.	1.	-10.	2.
74	-0.	-0.	-1.	-1.	-2.	420.	3.	2.	-1.	-1.
75	143.	199.	214.	229.	262.	385.	233.	262.	526.	149.
76	1.	1.	1.	4.	3.	-4.	2.	1.	-1.	-3.
77	-3.	-4.	-4.	0.	0.	494.	1.	-2.	-16.	-4.
78	-2.	-0.	-0.	-3.	-2.	17.	-9.	-4.	2.	-2.

MATRIX : % DIFFERENCE IN MULTIPLIERS: BEA/UN

COLUMN	31	32	33	34	35	36	37	38	39	40
ROW										
1	72.	20.	-5.	-7.	34.	21.	38.	27.	49.	17.
2	92.	8.	-8.	-6.	35.	13.	36.	24.	44.	20.
3	46.	30.	3.	3.	2.	16.	16.	4.	8.	58.
4	122.	15.	-10.	-8.	23.	31.	35.	25.	36.	41.
5	93.	28.	-3.	16.	14.	-1.	-8.	98.	-12.	-8.
6	111.	32.	0.	20.	3.	20.	41.	-12.	12.	-9.
7	35.	2.	-2.	0.	-4.	-7.	-7.	13.	-10.	-7.
8	-9.	76.	11.	19.	14.	30.	1.	1.	5.	6.
9	3.	83.	4.	27.	-2.	-9.	-3.	1.	5.	8.
10	-337.	-3.	-11.	-4.	-15.	-2.	1.	23.	-4.	-0.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	-2.	14.	12.	13.	13.	11.	3.	7.	5.	6.
13	138.	76.	69.	49.	7.	29.	-352.	-143.	826.	-354.
14	26.	20.	-4.	-6.	7.	6.	14.	10.	13.	1.
15	5.	-1.	-0.	-0.	0.	-0.	6.	7.	5.	-2.
16	53.	-1.	164.	5.	52.	12.	33.	8.	23.	46.
17	23.	-10.	182.	-3.	23.	15.	140.	17.	33.	76.
18	17.	20.	20.	29.	1.	-1.	3.	8.	2.	-1.
19	248.	81.	4.	0.	85.	-7.	178.	181.	96.	241.
20	12.	31.	11.	-0.	1.	8.	15.	6.	8.	33.
21	83.	-1.	-6.	-4.	-4.	6.	22.	18.	19.	-3.
22	95.	-253.	275.	118.	1525.	158.	-3147.	-179.	1854.	-493.
23	15.	-221.	79.	-729.	-431.	-704.	-945.	-162.	2148.	-260.
24	19.	12.	4.	4.	4.	3.	41.	29.	2.	17.
25	9.	-5.	-1.	-2.	-3.	5.	45.	44.	-0.	5.
26	25.	37.	4.	19.	31.	26.	21.	28.	-12.	22.
27	40.	-9.	-2.	-3.	-3.	3.	3.	-1.	-2.	1.
28	50.	-12.	163.	-2.	2.	20.	50.	-4.	8.	31.
29	-3.	50.	-4.	-6.	29.	-3.	23.	21.	18.	-2.
30	2.	16.	7.	14.	9.	20.	73.	91.	-4.	-8.
31	-1.	15.	-3.	2.	4.	1.	-2.	-2.	-1.	-1.
32	10.	-0.	23.	-3.	0.	6.	38.	57.	13.	120.
33	17.	-334.	-0.	-5.	34.	-0.	7.	7.	9.	21.
34	22.	214.	-2619.	-0.	25.	7.	86.	98.	34.	15.
35	23.	4.	-4.	5.	-0.	94.	750.	2648.	207.	-8.
36	4.	182.	4.	27.	-2.	-1.	19.	7.	38.	22.
37	10.	61.	0.	17.	41.	6.	1.	287.	-5.	-9.
38	15.	77.	10.	29.	16.	15.	20.	-4.	9.	-8.
39	2.	17.	-5.	-2.	2.	32.	24.	28.	0.	-5.
40	-3.	62.	15.	25.	19.	2.	128.	60.	146.	-0.
41	17.	84.	2.	33.	70.	43.	11.	60.	5.	2.
42	20.	16.	1.	0.	33.	-3.	5.	43.	7.	-5.
43	-6.	11.	-11.	-7.	-8.	-3.	19.	6.	34.	154.
44	3.	-12.	-15.	-14.	-8.	1.	146.	6.	640.	89.
45	1.	36.	-0.	11.	-4.	-6.	-3.	-9.	-3.	20.
46	6.	5.	-0.	2.	-3.	-4.	-2.	-4.	-3.	46.
47	13.	199.	18.	63.	15.	38.	93.	6.	45.	23.
48	-463.	3.	-7.	2.	-8.	20.	14.	29.	1.	91.
49	-0.	218.	2.	41.	19.	13.	9.	12.	10.	30.
50	15.	59.	5.	30.	23.	23.	-4.	-7.	-2.	18.
51	44.	37.	37.	33.	68.	-155.	7724.	130.	-1179.	162.
52	-5.	20.	-2.	-4.	27.	25.	7.	361.	47.	8.

MATRIX : % DIFFERENCE IN MULTIPLIERS: BEA/UN

COLUMN	31	32	33	34	35	36	37	38	39	40
ROW										
53	-7.	116.	5.	31.	93.	40.	2.	54.	8.	10.
54	4.	16.	10.	11.	35.	11.	40.	23.	20.	297.
55	6.	111.	19.	35.	68.	-1.	41.	125.	40.	260.
56	12.	501.	36.	53.	43.	57.	88.	-236.	158.	523.
57	4.	638.	82.	141.	148.	608.	108.	-195.	150.	166.
58	-2.	38.	-5.	3.	38.	5.	47.	352.	44.	509.
59	20.	-352.	11.	53.	31.	32.	416.	824.	212.	-1082.
60	7.	-400.	23.	121.	53.	79.	51.	-182.	245.	-1351.
61	-3.	3.	-0.	0.	3.	-4.	21.	-4.	10.	241.
62	3.	743.	15.	45.	39.	26.	10.	100.	24.	-2.
63	5.	20.	-0.	19.	40.	4.	6.	13.	-8.	1.
64	8.	46.	32.	0.	2.	1.	-0.	5.	7.	16.
65	-4.	1.	-2.	-1.	-0.	-5.	-4.	-1.	-4.	-4.
66	8.	4.	0.	1.	2.	-0.	1.	3.	3.	-2.
67	2305.	1910.	977.	1633.	2013.	1493.	1562.	1589.	1956.	1311.
68	7.	-1.	-3.	-0.	-5.	-6.	-3.	-7.	-3.	-3.
69	2.	-0.	-2.	-1.	0.	-0.	1.	-1.	-1.	-1.
70	-1.	5.	0.	1.	1.	0.	-1.	-0.	-2.	-1.
71	-7.	10.	-1.	2.	5.	8.	3.	3.	0.	0.
72	5.	0.	-1.	1.	1.	2.	8.	11.	4.	-7.
73	0.	1.	-2.	-1.	1.	1.	3.	5.	2.	2.
74	-2.	7.	-4.	-1.	-0.	-2.	1.	5.	4.	2.
75	369.	224.	288.	260.	228.	219.	256.	222.	249.	170.
76	5.	2.	-5.	-2.	2.	-0.	3.	5.	2.	-1.
77	-3.	-2.	-4.	-4.	-4.	-3.	-2.	-1.	10.	-2.
78	3.	-0.	-2.	-1.	-2.	-1.	-3.	-2.	-2.	-1.

MATRIX : % DIFFERENCE IN MULTIPLIERS: BEA/UN

COLUMN	41	42	43	44	45	46	47	48	49	50
ROW										
1	40.	11.	25.	7.	23.	20.	21.	23.	43.	15.
2	53.	21.	29.	14.	25.	16.	27.	26.	45.	16.
3	23.	32.	40.	26.	25.	51.	39.	4.	46.	21.
4	47.	31.	33.	20.	37.	34.	35.	42.	53.	30.
5	-8.	25.	-8.	-3.	-10.	-8.	17.	2.	-6.	2.
6	-6.	4.	-3.	14.	20.	10.	35.	9.	-0.	11.
7	-6.	18.	-9.	-2.	-8.	-5.	17.	3.	-3.	3.
8	3.	24.	-2.	4.	3.	2.	5.	-4.	-3.	7.
9	4.	4.	-7.	7.	5.	18.	64.	19.	8.	13.
10	7.	-8.	9.	7.	5.	7.	56.	17.	76.	13.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	9.	14.	7.	12.	11.	10.	16.	33.	13.	7.
13	-168.	249.	839.	-907.	-349.	3.	-189.	6163.	-158.	-22.
14	12.	3.	8.	-2.	7.	5.	5.	3.	12.	3.
15	5.	-4.	2.	-1.	-0.	-1.	-3.	-3.	0.	-2.
16	250.	33.	116.	55.	43.	3.	98.	24.	119.	23.
17	2368.	-13.	721.	54.	36.	22.	219.	46.	252.	85.
18	-1.	-4.	1.	1.	-0.	3.	-2.	-4.	1.	-4.
19	-1671.	62.	-192.	1323.	-1538.	-611.	316.	258.	-728.	-441.
20	2.	15.	42.	25.	24.	54.	39.	-1.	26.	19.
21	-0.	-5.	-2.	-1.	1.	193.	38.	12.	25.	-4.
22	-259.	-306.	-968.	-261.	-707.	-317.	-584.	-383.	-173.	-380.
23	-201.	-173.	-275.	-8.	-362.	-256.	-195.	-240.	-258.	-216.
24	21.	22.	24.	29.	27.	32.	41.	33.	42.	25.
25	-5.	-11.	-4.	6.	12.	27.	31.	32.	24.	1.
26	58.	33.	28.	22.	19.	13.	21.	15.	33.	21.
27	6.	-5.	13.	6.	5.	5.	39.	15.	32.	16.
28	32.	13.	73.	10.	1.	-10.	115.	31.	100.	50.
29	-2.	18.	3.	-2.	9.	11.	8.	-7.	9.	-0.
30	3.	-14.	150.	2.	10.	7.	65.	43.	108.	90.
31	-1.	8.	-4.	-0.	2.	-2.	3.	-6.	-5.	7.
32	16.	-1.	86.	3.	-2.	-12.	57.	8.	85.	38.
33	80.	20.	48.	-15.	112.	99.	61.	-15.	-12.	26.
34	193.	-20.	21.	57.	29.	91.	78.	31.	59.	12.
35	1421.	57.	-346.	266.	1051.	-710.	478.	296.	-434.	-5784.
36	7.	-11.	-14.	0.	-0.	35.	-3.	12.	-8.	-5.
37	-10.	-4.	-7.	-4.	-8.	-4.	1.	-4.	-6.	-1.
38	-8.	-7.	-6.	10.	15.	11.	19.	3.	-1.	2.
39	10.	1.	33.	4.	13.	10.	48.	22.	65.	36.
40	-4365.	13576.	58.	370.	-9.	4.	-9.	-18.	-11.	947.
41	-0.	3.	-9.	-6.	10.	6.	9.	7.	49.	23.
42	18.	-1.	17.	9.	0.	21.	41.	-2.	3.	-1.
43	158.	243.	-3.	-13.	-14.	7.	201.	-7.	53.	-174.
44	268.	771.	526.	-1.	-677.	449.	170.	812.	192.	9.
45	-1.	46.	116.	-201.	-1.	-472.	114.	197.	613.	11.
46	10.	242.	-18.	64.	-226.	-3.	10.	-1026.	-2304.	42.
47	32.	10.	-15.	-1.	-12.	2.	-2.	-4.	-6.	-9.
48	0.	45.	149.	1026.	-254.	-385.	-268.	-2.	-1033.	-321.
49	170.	324.	-12.	-13.	-10.	-14.	-16.	-13.	-2.	146.
50	37.	59.	-14.	-14.	23.	-20.	424.	20.	261.	-2.
51	164.	387.	421.	-738.	3243.	309.	8896.	-53707.	-280.	234.
52	2537.	-3004.	-1140.	23027.	304.	-299.	1981.	6165.	-374.	244.

MATRIX : % DIFFERENCE IN MULTIPLIERS: BEA/UN

COLUMN / ROW	41	42	43	44	45	46	47	48	49	50
53	125.	48.	7.	28.	-1.	-19.	-13.	-13.	-7.	92.
54	-682.	90.	251.	17.	133.	-548.	218.	299.	438.	42.
55	139.	153.	1260.	-3.	225.	162.	143.	202.	135.	400.
56	-344.	817.	-498.	1735.	-1850.	-439.	-3822.	2044.	-273.	-442.
57	-725.	432.	-1213.	1320.	386.	298.	340.	336.	-2691.	-761.
58	532.	339.	-22.	-14.	38.	0.	261.	1332.	794.	-7.
59	-575.	2312.	-173.	128.	-891.	-330.	2174.	-11991.	-362.	-169.
60	-185.	-678.	-292.	-1081.	-360.	-143.	-446.	-334.	-445.	-226.
61	13.	81.	-835.	-907.	188.	85.	40.	211.	119.	99.
62	638.	600.	26.	19.	111.	909.	347.	18.	-5.	988.
63	27.	15.	52.	0.	16.	14.	16.	21.	18.	19.
64	187.	-0.	9.	84.	12.	63.	45.	29.	72.	11.
65	-1.	4.	-1.	-2.	-1.	-3.	11.	0.	3.	2.
66	-0.	3.	4.	1.	1.	-3.	1.	-1.	0.	3.
67	1511.	1476.	1349.	1696.	1223.	1114.	1230.	1064.	1202.	1254.
68	-4.	0.	-0.	0.	-2.	2.	6.	2.	-1.	-0.
69	5.	0.	-3.	-2.	-1.	-3.	3.	-4.	2.	4.
70	-2.	0.	5.	-1.	-5.	-0.	2.	0.	5.	-3.
71	1.	2.	16.	6.	8.	1.	7.	-8.	10.	-1.
72	8.	1.	7.	-2.	2.	2.	-3.	-1.	3.	1.
73	6.	2.	2.	-2.	5.	2.	6.	4.	5.	3.
74	22.	7.	24.	7.	18.	11.	13.	6.	16.	14.
75	222.	177.	184.	223.	176.	176.	153.	157.	177.	147.
76	3.	0.	2.	-1.	-1.	-5.	-1.	-4.	-1.	0.
77	0.	-3.	-1.	-6.	-1.	-5.	-2.	-2.	-2.	-2.
78	-1.	2.	-7.	-1.	-2.	4.	12.	6.	3.	8.

MATRIX : % DIFFERENCE IN MULTIPLIERS: BEA/UN

COLUMN	51	52	53	54	55	56	57	58	59	60
ROW										
1	16.	34.	17.	11.	13.	17.	11.	20.	12.	8.
2	20.	33.	23.	3.	15.	21.	14.	18.	15.	9.
3	48.	9.	25.	2.	22.	3.	19.	20.	20.	65.
4	46.	31.	31.	16.	22.	23.	22.	34.	17.	27.
5	39.	2.	-3.	-6.	1.	35.	39.	39.	-5.	7.
6	-9.	-9.	-9.	-8.	5.	23.	-7.	-7.	9.	-9.
7	26.	1.	-1.	-8.	3.	17.	11.	14.	-4.	7.
8	23.	7.	1.	11.	-4.	14.	16.	26.	6.	0.
9	117.	9.	11.	-8.	7.	21.	-3.	3.	5.	11.
10	6.	-4.	14.	-12.	-3.	2.	-19.	-22.	1.	40.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	32.	8.	13.	12.	10.	12.	8.	24.	7.	8.
13	-590.	-132.	-2730.	-197.	-106.	1.	-167.	-921.	-3143.	-117.
14	7.	11.	6.	-1.	2.	6.	-2.	3.	6.	-0.
15	2.	1.	-1.	-5.	-2.	-1.	-6.	-4.	2.	-5.
16	45.	31.	48.	-11.	18.	34.	64.	21.	-5.	19.
17	13.	-7.	19.	-6.	-8.	13.	44.	21.	-9.	69.
18	-6.	0.	2.	1.	-0.	1.	-5.	-0.	4.	-2.
19	-597.	487.	265.	440.	124.	143.	-378.	-199.	-8.	213.
20	53.	1.	25.	-0.	18.	-0.	19.	32.	13.	70.
21	-0.	-23.	24.	-12.	1.	0.	1.	2.	3.	44.
22	-789.	-175.	-436.	-262.	-130.	-13.	-410.	-2412.	104.	83.
23	-796.	-155.	-701.	-426.	-111.	-193.	-174.	-183.	58.	-21.
24	17.	11.	2.	3.	4.	5.	-6.	13.	27.	38.
25	11.	-2.	32.	-18.	-13.	3.	-4.	-11.	4.	25.
26	121.	27.	4.	15.	36.	2.	28.	46.	29.	27.
27	4.	-3.	5.	-11.	-5.	3.	-12.	-16.	0.	24.
28	-5.	0.	10.	-21.	-11.	1.	-5.	-15.	-3.	37.
29	229.	28.	12.	10.	6.	1.	6.	23.	10.	0.
30	40.	-6.	9.	-16.	-8.	15.	24.	257.	-2.	4.
31	16.	-0.	-4.	3.	-8.	8.	8.	12.	0.	-1.
32	-5.	-2.	26.	-21.	-8.	5.	-2.	-14.	-2.	52.
33	124.	85.	45.	28.	58.	67.	53.	73.	57.	30.
34	32.	71.	120.	-23.	31.	39.	21.	48.	12.	7.
35	-18.	91.	201.	16.	-12.	-11.	-18.	293.	-4.	41.
36	105.	-7.	-4.	-14.	-6.	22.	-6.	-9.	3.	-6.
37	35.	5.	-0.	-4.	-2.	31.	36.	43.	-3.	7.
38	-5.	-8.	-8.	-5.	-5.	16.	-3.	-15.	4.	-7.
39	24.	4.	22.	-9.	-1.	36.	4.	10.	1.	14.
40	-3365.	66.	1.	325.	133.	103.	173.	158.	72.	163.
41	-9.	-13.	18.	-14.	-6.	-5.	-9.	47.	-4.	-9.
42	-1.	-11.	7.	-12.	-2.	1.	5.	27.	-3.	-4.
43	-235.	8.	10.	139.	40.	-393.	195.	-227.	9.	-437.
44	-179.	70.	89.	92.	-3.	54.	29.	20.	102.	-5.
45	649.	12.	17.	-5.	7.	23.	8.	7.	55.	48.
46	163.	592.	24.	35.	4.	61.	611.	50.	52.	46.
47	12.	6.	-2.	7.	0.	7.	7.	6.	-1.	-16.
48	-189.	63.	59.	108.	57.	52.	3.	145.	37.	119.
49	44.	-1.	-1.	61.	37.	163.	521.	-9.	8.	-1.
50	239.	82.	50.	25.	39.	62.	824.	326.	-3.	-20.
51	-4.	-222.	515.	717.	465.	20.	649.	-187.	-973.	383.
52	-155.	-2.	-221.	-10.	180.	101.	336.	-496.	-2.	643.

MATRIX : % DIFFERENCE IN MULTIPLIERS: BEA/UN

COLUMN	51	52	53	54	55	56	57	58	59	60
ROW										
53	0.	-24.	-1.	-4.	-7.	2.	653.	-4.	23.	41.
54	-213.	7071.	-179.	-1.	77.	57.	60.	220.	145.	104.
55	-15.	-6.	-0.	-17.	-1.	-5.	30.	-12.	-2.	18.
56	403.	-301.	147.	-489.	-135.	-1.	-1558.	-1690.	4.	-1.
57	-17.	-11618.	6.	-1695.	-161.	-13.	0.	104.	35.	28.
58	175.	-26.	33.	-428.	-18.	47.	-410.	-1.	-3.	10.
59	-224.	-931.	-697.	-440.	-3678.	-1177.	-137.	-172.	-2.	-1446.
60	-800.	-385.	3059.	-553.	-118.	-335.	-224.	-685.	-1618.	-2.
61	-314.	37.	215.	48.	7.	15.	32.	32.	38.	603.
62	-792.	-9.	5113.	-24.	741.	-228.	735.	532.	-1.	-14.
63	-2380.	56.	37.	17.	104.	75.	84.	73.	5.	-5.
64	83.	14.	183.	-23.	40.	31.	10.	15.	14.	28.
65	10.	-1.	1.	-7.	-2.	5.	1.	3.	-2.	-0.
66	4.	0.	2.	2.	6.	1.	-1.	7.	2.	0.
67	1294.	1414.	1144.	2964.	1743.	1236.	1176.	1459.	1939.	1057.
68	21.	-1.	-1.	-7.	-1.	5.	-5.	-2.	-1.	-2.
69	2.	-8.	4.	-6.	-4.	-1.	-3.	-4.	-1.	1.
70	4.	3.	-2.	3.	6.	5.	2.	10.	1.	5.
71	19.	6.	4.	2.	2.	0.	2.	13.	3.	6.
72	4.	15.	1.	1.	3.	4.	-5.	-1.	3.	-8.
73	13.	14.	23.	-17.	0.	0.	1.	11.	1.	-0.
74	47.	14.	7.	7.	6.	1.	6.	74.	-5.	3.
75	141.	196.	142.	295.	168.	180.	133.	151.	235.	156.
76	5.	-2.	-1.	4.	5.	-2.	-3.	4.	3.	-1.
77	157.	1.	8.	-17.	-2.	-4.	-3.	8.	-4.	-2.
78	21.	-0.	2.	-8.	-0.	3.	-1.	-1.	-1.	-1.

MATRIX : % DIFFERENCE IN MULTIPLIERS: BEA/UN

COLUMN / ROW	61	62	63	64	65	66	67	68	69	70
1	11.	-0.	37.	29.	18.	31.	-81.	29.	125.	14.
2	16.	-15.	31.	5.	19.	34.	13.	38.	124.	20.
3	-13.	56.	9.	-8.	7.	1.	-107.	34.	64.	-1.
4	7.	0.	54.	10.	68.	48.	66.	70.	9.	52.
5	-5.	8.	4.	-1.	-1.	18.	-102.	103.	115.	21.
6	-3.	-15.	-12.	-16.	5.	6.	-102.	49.	119.	15.
7	-4.	8.	-3.	-1.	36.	4.	-103.	-11.	19.	-3.
8	3.	13.	62.	23.	-7.	-3.	-105.	-14.	-0.	2.
9	1.	16.	11.	15.	9.	2.	-109.	43.	48.	19.
10	4.	16.	-24.	6.	51.	39.	-104.	153.	92.	2.
11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	10.	12.	20.	9.	8.	-2.	-90.	38.	10.	31.
13	-133.	-277.	-127.	187.	-178.	4.	-86.	80.	69.	17.
14	4.	-8.	11.	14.	1.	16.	-146.	6.	35.	-0.
15	-1.	-11.	0.	5.	-1.	13.	-180.	-2.	2.	-3.
16	-0.	-19.	45.	-3.	9.	16.	-103.	45.	169.	19.
17	-9.	45.	66.	-1.	-2.	10.	-103.	36.	53.	8.
18	-2.	1.	7.	2.	1.	-0.	-109.	-0.	100.	15.
19	-9.	-276.	52.	-2078.	14.	22.	-106.	138.	67.	21.
20	-10.	62.	24.	-10.	7.	2.	-105.	37.	29.	-1.
21	23.	-5.	111.	-2.	26.	19.	-105.	40.	3.	27.
22	-10.	-404.	-186.	-12.	10.	-15.	-96.	103.	197.	18.
23	-7.	-144.	-331.	-195.	-7.	47.	-105.	51.	297.	105.
24	17.	21.	2.	-3.	13.	16.	-102.	63.	13.	-7.
25	15.	3.	4.	-9.	4.	16.	-102.	38.	4.	-2.
26	22.	23.	73.	94.	5.	19.	-102.	32.	20.	-6.
27	1.	19.	-10.	-6.	14.	21.	-104.	50.	50.	2.
28	-3.	5.	10.	-8.	-4.	1.	-103.	31.	41.	3.
29	7.	-996.	49.	76.	1.	201.	-100.	29.	9.	-2.
30	-1.	24.	46.	-11.	7.	0.	-104.	37.	20.	21.
31	-1.	6.	16.	2.	-3.	-0.	-103.	1.	0.	1.
32	1.	-7.	9.	-9.	-1.	3.	-103.	19.	16.	3.
33	49.	-581.	-194.	12.	44.	48.	-50.	63.	113.	25.
34	25.	-10.	-5.	-10.	8.	19.	-94.	12.	9.	5.
35	1.	12.	-5.	-7.	5.	-0.	-107.	31.	34.	11.
36	-2.	12.	7.	2.	7.	3.	-102.	48.	34.	22.
37	-4.	10.	19.	1.	-1.	13.	-102.	39.	94.	19.
38	-1.	-11.	-3.	-12.	-1.	5.	-102.	29.	93.	15.
39	2.	-11.	2.	15.	3.	8.	-105.	37.	84.	6.
40	-10.	266.	74.	128.	5.	-0.	-69.	33.	25.	32.
41	12.	-5.	37.	-6.	1.	2.	-102.	30.	46.	15.
42	-3.	-1.	14.	-6.	0.	6.	-102.	30.	31.	7.
43	-7.	107.	-4.	316.	-5.	2625.	-100.	-10.	1.	-7.
44	-1052.	-19.	-16.	-1627.	18.	-239.	-100.	-4.	-4.	-3.
45	5.	45.	-2.	10.	10.	11.	-101.	-4.	30.	9.
46	12.	17.	3.	12.	6.	-1.	-113.	37.	39.	19.
47	10.	-3.	462.	153.	-3.	25.	-100.	12.	80.	15.
48	109.	34.	-0.	11.	49.	38.	-103.	112.	99.	-5.
49	-7.	29.	167.	233.	-1.	36.	-101.	13.	105.	13.
50	7.	-3461.	17.	38.	-7.	16.	-101.	17.	53.	9.
51	986.	-195.	83.	2286.	57.	1841.	-100.	40.	70.	34.
52	3.	336.	141.	84.	3.	96.	-100.	23.	-1.	-1.

MATRIX : % DIFFERENCE IN MULTIPLIERS: BEA/UN

COLUMN / ROW	61	62	63	64	65	66	67	68	69	70
53	-6.	4.	18.	7.	-2.	41.	-100.	5.	34.	2.
54	-10.	64.	99.	70.	5.	3.	122.	33.	11.	11.
55	-0.	-9.	18.	-3.	9.	-2.	-106.	21.	11.	24.
56	331.	-480.	-180.	201.	8.	-5.	-97.	25.	33.	4.
57	265.	60.	-525.	10.	7.	-13.	-90.	29.	98.	34.
58	13.	130.	-3607.	72.	-4.	9.	-101.	9.	1.	-1.
59	35.	-348.	61.	226.	1.	4.	-102.	37.	11.	9.
60	-303.	-649.	-145.	-913.	-4.	916.	-111.	18.	211.	37.
61	-1.	108.	-0.	167.	-4.	51.	-101.	21.	15.	-1.
62	48.	-3.	-365.	267.	4.	44.	-101.	33.	91.	11.
63	18.	-16.	-1.	28.	1.	75.	-116.	11.	6.	-5.
64	33.	-9.	43.	-1.	5.	20.	-102.	21.	9.	-2.
65	-3.	1.	1.	-3.	-0.	8.	-108.	-1.	8.	-4.
66	4.	-8.	3.	5.	-1.	0.	-96.	5.	-1.	-3.
67	1517.	1790.	1869.	2121.	919.	1082.	-17.	2062.	2012.	410.
68	-2.	1.	0.	2.	21.	2.	-111.	-3.	0.	-2.
69	-1.	-5.	-0.	-6.	-1.	5.	-107.	10.	0.	-1.
70	1.	-2.	8.	2.	-1.	2.	-93.	5.	-0.	-1.
71	3.	-0.	10.	10.	-1.	7.	159.	-4.	-2.	-2.
72	3.	-7.	2.	3.	-0.	10.	-294.	4.	-1.	-2.
73	3.	-8.	1.	1.	1.	7.	143.	7.	-1.	-3.
74	3.	6.	8.	11.	-3.	-0.	-101.	1.	-3.	-2.
75	158.	181.	234.	263.	242.	125.	-97.	298.	93.	298.
76	3.	-5.	4.	5.	-1.	4.	-121.	14.	1.	-4.
77	-2.	-11.	-1.	19.	-3.	15.	-100.	-10.	-5.	-4.
78	-2.	-4.	2.	7.	-2.	0.	-103.	3.	-2.	-3.

MATRIX : % DIFFERENCE IN MULTIPLIERS: BEA/UN

COLUMN / ROW	71	72	73	74	75	76	77	78
1	981.	15.	8.	36.	6.	8.	14.	624.
2	694.	14.	11.	35.	13.	10.	14.	10.
3	10.	4.	115.	27.	3.	-1.	31.	-77.
4	559.	29.	37.	23.	34.	26.	-318.	-8.
5	32.	9.	18.	-0.	4.	12.	20.	-72.
6	28.	-5.	22.	4.	-4.	5.	62.	-73.
7	72.	-1.	10.	13.	2.	-3.	1.	-197.
8	146.	0.	7.	1.	12.	2.	-281.	-111.
9	6.	0.	67.	1.	8.	3.	37.	-76.
10	75.	-1.	56.	7.	-15.	5.	-634.	-81.
11	0.	0.	0.	0.	0.	0.	0.	0.
12	-6.	5.	38.	34.	3.	-0.	38.	-78.
13	197.	43.	26.	397.	69.	46.	25.	28.
14	206.	2.	-3.	8.	1.	1.	1.	781.
15	49.	-0.	-11.	-1.	-2.	1.	-1.	-1034.
16	230.	-3.	102.	3.	24.	4.	-15.	-46.
17	97.	-7.	137.	-7.	15.	-1.	-18.	-24.
18	99.	-2.	52.	3.	14.	7.	48.	110.
19	301.	-4.	51.	-4.	20.	1.	-21.	-74.
20	3.	3.	177.	21.	6.	-4.	31.	-76.
21	355.	4.	14.	1.	22.	13.	-230.	5.
22	271.	65.	115.	425.	36.	129.	27.	227.
23	12.	170.	82.	280.	46.	61.	-5.	-72.
24	85.	7.	261.	18.	9.	-15.	25.	-64.
25	94.	-4.	86.	-1.	6.	-4.	790.	-36.
26	64.	21.	98.	21.	1.	-5.	-2.	-36.
27	48.	-2.	60.	0.	-2.	-1.	56.	-77.
28	31.	-4.	114.	-8.	8.	-2.	-6.	-65.
29	132.	-3.	-25.	7.	14.	-0.	-11.	-71.
30	-5.	0.	34.	0.	4.	0.	32.	-77.
31	45.	-1.	1.	-0.	4.	3.	14.	154.
32	26.	-5.	52.	-3.	6.	-2.	-5.	-27.
33	324.	-5.	66.	92.	6.	33.	14.	-46.
34	166.	-3.	30.	8.	-3.	1.	-2.	58.
35	20.	-11.	13.	-1.	2.	-2.	19.	-68.
36	5.	-3.	5.	-2.	8.	5.	25.	-77.
37	23.	6.	7.	-2.	12.	10.	3.	-69.
38	17.	-4.	13.	-3.	1.	5.	21.	-70.
39	47.	-2.	10.	1.	2.	-2.	30.	-73.
40	-5.	11.	34.	50.	5.	1.	37.	-77.
41	55.	6.	7.	-2.	17.	7.	-3.	5.
42	20.	-2.	37.	-1.	8.	3.	13.	-66.
43	57.	18.	-31.	-2.	15.	95.	-4.	-159.
44	314.	32.	-30.	12.	29.	220.	28.	-66.
45	7.	4.	-18.	18.	7.	8.	10.	-49.
46	-4.	14.	64.	25.	3.	-1.	33.	-77.
47	89.	13.	-18.	-1.	43.	27.	0.	-13.
48	128.	11.	238.	35.	-3.	-6.	157.	-76.
49	46.	50.	-7.	10.	28.	23.	13.	-56.
50	84.	20.	-14.	-3.	14.	24.	-3.	-242.
51	273.	131.	11.	151.	100.	1256.	87.	-46.
52	-1.	6.	-30.	5.	14.	54.	7.	-77.

MATRIX : % DIFFERENCE IN MULTIPLIERS: BEA/UN

COLUMN / ROW	71	72	73	74	75	76	77	78
53	30.	4.	-26.	5.	15.	36.	24.	-61.
54	2.	-3.	21.	36.	3.	2.	-4.	-76.
55	1.	1.	23.	1.	7.	2.	72.	-77.
56	47.	83.	55.	26.	21.	6.	28.	-33.
57	299.	-2.	106.	70.	57.	27.	15.	-145.
58	50.	11.	-26.	-4.	9.	13.	0.	-162.
59	150.	26.	15.	-3.	16.	18.	-11.	-122.
60	283.	260.	89.	790.	116.	64.	-16.	-105.
61	95.	0.	-19.	20.	7.	16.	-17.	-192.
62	9.	5.	3.	13.	27.	-2.	8.	-74.
63	68.	-2.	-1.	8.	-4.	-1.	34.	-60.
64	26.	-4.	-5.	12.	-3.	4.	29.	-70.
65	34.	-0.	2.	0.	1.	-0.	-17.	-165.
66	29.	1.	8.	-0.	1.	-3.	81.	-11.
67	1972.	700.	21395.	1271.	981.	-15.	4420.	549.
68	54.	-2.	-7.	7.	-1.	-0.	-294.	-186.
69	19.	-1.	2.	-2.	-0.	1.	16.	-41.
70	6.	0.	15.	-0.	-0.	0.	138.	-3.
71	0.	-0.	1.	-1.	-2.	0.	22.	-139.
72	48.	-0.	0.	-1.	-2.	-0.	8.	46.
73	17.	-1.	-0.	1.	-1.	0.	31.	-59.
74	33.	-1.	-15.	-0.	0.	3.	9.	-186.
75	836.	129.	2083.	161.	-1.	-67.	-234.	-10508.
76	42.	-1.	-2.	1.	-2.	0.	83.	-59.
77	5.	3.	-20.	-3.	5.	6.	0.	-152.
78	24.	-1.	-8.	-1.	-0.	1.	4.	0.

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